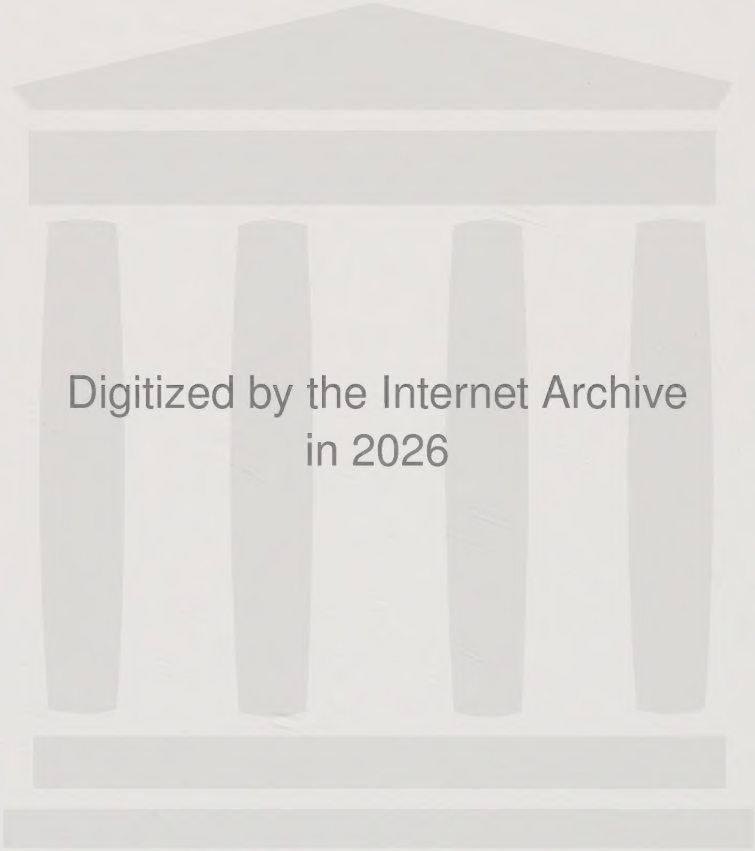
LAND OWNERSHIP IN THE ECONOMIC DEVELOPMENT OF GHANA 1945–1975

by
Nicholas Wadie Ababio-Appah

UNIVERSITY OF LUND SWEDEN
SPRING TERM

SKRIFTER UTGIVNA AV EKONOMISK-HISTORISKA FÖRENINGEN
LUND 1981


Digitized by the Internet Archive
in 2026

https://archive.org/details/IA41553209_0002

LAND OWNERSHIP IN THE ECONOMIC DEVELOPMENT OF GHANA 1945–1975

by
Nicholas Wadie Ababio-Appah

UNIVERSITY OF LUND
SWEDEN
Spring Term –1981

(Ph. D Dissertation)

UNIV.
LEIDEN
BIBL.

Printed in Sweden
Studentlitteratur
Lund 1981

In the loving Memory of My Mother - Madam Amma Tanoa -

whose meagre farm income paid for my education.

FOREWORD AND ACKNOWLEDGEMENTS

The third world countries are aspiring to develop their Agricultural Economies so as to satisfy the demand for food of their increasing populations. In order to raise food production to the level much closer to that of the rate of population growth, the Governments must look carefully into the existing problems of land ownership systems and remove all the major obstacles that hinder economic development. It is by this means that a policy of better reform can be made. A better land reform policy is not only to ensure equitable distribution and allocation of land resources but it also grants property rights to such resources and gives guarantees of safeguards of security of ownership of titles to land.

The investment in such a reform is bound to be expensive in the sense of the radical changes it envisages in the traditions and the institutional arrangements of the society but will surely yield a high dividend of increased production provided that the active producers are not harassed by undue political interferences, animosity, nepotism and corruption.

I wish to express the deepest appreciation to the authorities of the University for the financial support and all the facilities for this study; this extends to the Swedish Government. Without the Government's policy of free education both my under-graduate and post-graduate studies in Sweden would not have been possible.

I am greatly indebted to Professor Lennart Jörberg, for his kind advice and close supervision for this work. On completion of my under-graduate studies I did not know where my fancy should take me into the field of research. He advised me to choose a topic which I could make good use of my background in Agriculture. The advice was useful and it added zest to my attempts of the investigations into many of the land problems. Professor Jörberg was not only interested in my studies but he also showed a keen interest in my Welfare. On several occasions when my resistance to the cruel european weather had gone down I decided to curtail my studies but it was upon his encouragement that I gathered new momentum towards the completion of my studies.

I am also indebted to all the past and present lecturers and administrative staff of the Institute. I wish to make particular mention of Dr. Olle Krantz;

Dr. Carl Axel-Olsson; Dr. Rolf Olsson; Dr. Tommy Bengtson and the several guest lecturers who prepared me for the various graduate and post-graduate examinations. I am likewise greatly indebted to Dr. Christer Gunnarsson for his kind critical look into several of my seminar papers; and again, for the trouble of carefully reading all my drafts and making valuable suggestions.

On the Administration side, I wish to express my gratitude to Mr. Sten Wennerström, Mrs. Marie Styvén, Mrs. Kerstin Bengtsson and all other secretarial personnel of the Institute for the pressure of troubles I exerted on them during the whole period of my studies.

I am grateful to my mother in whose memory this work is. From the fruits of her labour on the farm, I was educated.

Finally I thank my son Alexander, all friends and relatives in Ghana for their patience and support during my lengthy stay in Europe.

N.W. Ababio-Appah

University of Lund,
LUND-SWEDEN.

9th April, 1981.

CONTENTS

Page

FOREWARD AND ACKNOWLEDGEMENTS

CONTENTS

LIST OF TABLES

LIST OF FIGURES

PART I - GENERAL BACKGROUND 1

Chapter 1 - MAIN INTRODUCTION 1

Chapter 2 - NORMATIVE AND EMPIRICAL DESCRIPTION OF THE ECONOMY - MAIN HYPOTHESIS 5

Chapter 3 - SOME THEORETICAL ASPECTS OF LAND PROPERTY RIGHTS 9

3.1 Introduction 9

3.2 The concept and role of property rights in the social system 11

3.3 Land Tenure System 12

3.4 Communal Ownership of land 13

3.5 Types of land acquisition 18

3.6 Security in land and productivity 22

3.7 Conclusion 26

PART II - PRIVATE OWNERSHIP 29

Chapter 4 - FAMILY UNIT HOLDINGS 29

4.1 Introduction 29

4.2 Sizes of Farms 30

4.3 Tenant Holders 44

4.4 Management of Holdings 52

4.5 Resettlement Units 79

4.6 Co-operative Ownership 94

4,7 Conclusion 100

PART III - PUBLIC OWNERSHIP 109

Chapter 5 - MINISTRY OF AGRICULTURE 109

5.1 Introduction 109

Page

5.2 The Impact of the War 109
5.3 Staffing and Re-organisation 112
5.4 Division 'A' - General Agriculture 112
5.5 Cocoa Disease Control and Rehabilitation 113
5.6 Conclusion 115

Chapter 6 - AGRICULTURAL CORPORATIONS AND STATUTORY BOARDS 117
6.1 Introduction 118
6.2 Agricultural Development Corporation 118
6.3 Gonja Development Corporation 119
6.4 Agricultural Produce Marketing Boards 120
6.5 Conclusion 122

Chapter 7 - NATURAL RESOURCE OWNERSHIP 125
7.1 Introduction 125
7.2 Forest Resources 126
7.3 Mineral Resources 133
7.4 Conclusion 138

Chapter 8 - THE NEW STRATEGY OF THE ECONOMY 141
8.1 Introduction 141
8.2 Economic Nationalism 144
8.3 Growth of Establishment and Employment by Ownership 146
8.4 Attempts at Agricultural Modernisation 149
8.5 The Agricultural Development strategy up to 1965 149
8.6 The mode of operation and performance 154
8.7 The period of instability of Agricultural Policies 157
8.8 Conclusion 170

PART IV - GENERAL OBSTACLES TO LAND DEVELOPMENT 174

Chapter 9 - BASIC AND TECHNICAL EDUCATION 174
9.1 Introduction 174
9.2 Growth of Educational System - 1940-1951 175
9.3 Provisions for Education - 1945-1955 177
9.4 Development of Education - Post-Independence period 178
9.5 Technical Education 182

Chapter 10 - AGRICULTURAL CREDIT FACILITIES 187
10.1 Introduction 187
10.2 Types of Agricultural Credit 189

Page

10.3 Non-Institutional System of Agricultural Credit 190

10.4 Institutional Credit 194

10.5 Pre-requisites for Agricultural Credit 200

10.6 Conclusion 202

PART V - GENERAL CONCLUSION OF THE RESEARCH 204

Chapter 11 - SUMMARY OF THE FINDINGS 205

11.1 Introduction 205

11.2 Summarised Conclusions of the Study 206

11.3 Bibliography 211

A. - Books 211

B. - Articles and Journals, etc..... 213

LIST OF TABLES

Page

Table 1 - Number of holders growing cocoa - Regions/District 31

2 - Distribution of cocoa output - 163/64 33

3 - Characteristic of farmers and holdings 35

4 - Acreage and yields per caretaker 39

5 - Number of people engaged in cocoa growing by sex and Region-1960 42

6 - Estimate of Numbers and Percentages of Migrants in the main occupations in the Gold Coast (Ghana) - 1954 55

7 - Crop Area by Regions - 1966-68 63

8 - Annual payments received by year-round labourers in Sub-Districts in the cocoa belt survey - July-August - 1970 . 64

9 - Percentages of Holders employing labour by method of payment of labour - Regions 67

10 - Common Types of Communal operations on cocoa farms 72

11 - Farm Calendar 74

12 - Distribution of Plough Farmers - 1948 81

13 - Co-operative Society Loans - 1945-1956 98

14 - Gross Export of Timber - 1945-1963 132

15 - Underground Gold Ore reserves - Number of Years' Reserve at current Milling Volume - Selected Years 137

16 - International Comparisons of Economic Performance in Selected Countries - 1960 141

17 - Compound Growth of Establishments and Employment by Ownership and Period - 1957-1971 (per cent per annum) ... 146

18 - Compound Employment Growth by Sector, Period, and Ownership - 1957-1971 (per cent per annum) 148

19 - Land and Labour Resources of Socialised Farms - 1965 157

20 - Public External Debt As At 12th January, 1971 171

21 - Population Ever at School - 1948 and 1960 178

22 - Regional Distribution of Selected Skills - 1960 179

23 - Development of Basic Education - 1957-1967 182

24 - Development Bank Loans (Cumulative as at 31/12/70) 200

LIST OF FIGURES

Figure 1 - Development Pattern of Farms for Farmer 1 35

2 - Classification of Family Unit Labour 69

3 - Estimated Percentages of Participation of Three Major Types of Agricultural Labour on Food Farms 75

PART I - GENERAL BACKGROUND

Chapter 1

MAIN INTRODUCTION

The purpose of this research is to investigate the system of ownership of land in Ghana by examining the historical attempts at changes that have taken place since the Second World War and find out the impact of the changes on the economy. We have chosen the thirty-year period after the war because we believe that most of the old assumptions underlying the indigenous social and economic institutions in tropical Africa began to undergo radical changes after the war. The research is therefore, aimed at tracing the direction of the economic changes over time and trying to find out the possible forces which influenced the changes. In the analysis, we shall not follow the historical sequence of the changes but will refer to the periods when the important events took place if necessary. We shall deal with the social and economic aspects of the peasants with the hope that our findings may one day be useful to the future land reformers in the country.

We are aware that many of the problems affecting the agricultural sector of the economy have already been explored by several scholars in the same discipline but apparently no one has investigated the problems in this particular dimension. We strongly believe that land titles and land distribution in terms of property rights towards development appear basic to all problems of agricultural development. Hence, in this research, our thesis is that, the system of land ownership which existed during the period did not provide adequate security to match the capital intensity of the development programme owing to the numerous obstacles that the system imposed on the society.

For our purpose here, the term "land" is used in a very broad economic context. It implies the soil and all its minerals, the sea, rivers, and all the cultures in them. It also includes the forests, the pastures together with the trees and all the game in them, although space will not permit us to deal with all these aspects. In short, "land" embraces all aspects of natural resources from which there can be derived economic and social benefits. Next, is the main theme of the research - how are these resources dis-

tributed and who owns which part of them? Or simply, who has property rights to the use of the resources? To answer these questions it is necessary to define the term, "ownership" in a Ghanaian context. According to Pogucki,

(i) There are absolute collective owners of land who cannot be regarded as holding a tenure of land, as they own the land allodially, that is in their own right, not subject to any superior rights of other persons. "If an analogy be made, the system resembles more the Anglo-Saxon system of pre-Norman England, then the feudal evolved as a result of the conquest.

(ii) There are groups of people whose ownership or tenures are held from such owners as mentioned in (i) above.

(iii) There are instances of statutory acquisitions of land from the owners [in category (i) above] by the government."[1]

Because of traditional values and because of modern notions of freedom and justice, one aspect of which was respecting the property rights of the citizens of the state,[2] there were statutory provisions providing for a transformation of rights in land governed by the customary law[3] into those in english law.[4] Accordingly, the government was bound to seek permission from the owners before acquisition of land was made for public purposes.[5] In theory, the tribal communities claim ownership only for ancestral reasons and no individual member of those communities has absolute right to own or transfer any parcel of land without the prior consent of the community as a whole. On the basis of such a theory, it could be argued that nobody owned land. In practice however, the ownership system and the possible changes that took place during the period were essentially the *utilitarian* aspects of land.

Although all lands belong to a particular *Stool* or *Skin*[2] from which common and communal ownership derive, increase in demand for them relative to rapid increase in population encouraged individualisation which was expressed in a considerable degree of permanency in the pattern of holdings. We shall constantly use cocoa cultivation and the population growth of Ghana as our "tools" of analysis for land distribution. Again, for lack of space and also to avoid undue repetition of the studies of other researchers[7] we do not find it necessary to devote complete chapters to cocoa cultivation and

the demographic aspects. We assume that the pure form of traditional ownership was shifting cultivation, practice of long fallow (30-40 years) period of cultivation ceased to exist by the end of the Second World War. The post-war was therefore, a period of transition of ownership of land towards improved methods of farming in which money played a central role. With the growth of the money economy land-use has become a transferable economic commodity and a sale of it is not uncommon.

As a result of the increase of the population even large holdings have become sub-divided into small holdings. The process of sub-division of lands appeared to be proceeding at a faster rate during the early part of the transition period than merely counter-acting movements of communities and the average sizes of holdings decreased significantly.[8] The diminishing sizes of holdings resulted in two clear changes. The small farm areas were sold out to allow expansion and improvements in the existing methods of farming. The attempts of improvement in farm methods were aimed at achieving large-scale commercial agriculture to gradually replace subsistence farming. The exception of the effects of the population pressure was in the Northern Regions. In the Northern Savannah zones, where population density was very low, the peasants could bring large areas of land under cultivation annually, but only with the use of the hoe and small application of the farm yard manure. Crop yield per acre of land was low owing to poor soil, wind erosion, diseases and pests.

This study has been divided into five main parts. Part I deals with the general background of the research and the theoretical discussions of property rights in land with particular reference to the institutional arrangements in Ghana. The interesting thing about Chapter 3 in this part is that customarily land is "*not to be sold*" but there are numerous cases of land purchases in the country. This reflects the need for a change in the native institutional arrangement since the capitalist mode of production began to take place on the land. The customary belief that land is not sold is an ancient phenomenon. In recent years even a member of the land-community has to pay a huge sum of money to the chief and his elders if he is to procure land for any viable project.

Parts II and III deal with the private and public ownership of land respectively. All the chapters in these two parts reflect the attempts of changes of land ownership and the problems involved in the changes.

Part IV is devoted to the discussion of the major obstacles to land development. Even where the obstacles are basically social and non-economic they are worth mentioning because of their long-term impact on the economy.

Part V is for the summary of the findings and general conclusions of the research. It gives the impression that the existing native institutions are closely linked with the customary land tenure systems which cannot be changed without changing the native institutions to allow adequate security of land ownership towards better economic development of the country.

References

1. See Pogucki, R.J.H. - "The main principles of rural land tenure" - in J.B. Wills (ed.) - Agriculture and Land-Use in Ghana - p 180.

2. See Amanfo Sagoe, K. - "Valuation, Acquisition and Compensation for purposes of Resettlement" - in the Volta Resettlement Experience - R. Chambers (ed.) - pp 58-9.

3. For Ghanaian customary laws of land ownership see Hayford, Casely - "Gold Coast Native Institutions".

4. See Pogucki, R.J.H. - op.cit. - p 180.

5. The Rights in the Public Sector include those vested in the Central Government or in the Local Authorities, while the rights in the private sector include those vested in the Head of a lineage, in the Head of a family or in an individual.

6. This depends upon the location of the land - "Stool" in the South and "Skin" in the North.

7. See Gunnarsson, Christer - "The Gold Coast Cocoa Industry" - 1900-1939. (Production, Prices and Structural Change); also Polly Hill - "The Migrant Cocoa Farmers of Southern Ghana"; also J.C. Caldwell - "Population Growth and Family Change in Africa"; also the Official Ghana Population Censuses - 1948; 1960; and 1970.

8. See Goddard, A.D. - "Population movements and land shortages in the Sokoto Closed-Settled Zones, Nigeria." - in Modern Migrations in West Africa - S. Amin (ed.) - p 262.

Chapter 2

NORMATIVE AND EMPIRICAL DESCRIPTION OF THE RESEARCH

The impression about Ghana's economy and its historical waves of development basically depended on the important role played by a peasant and his family. Accordingly, we have drawn up an hypothesis, "the Peasant Cultivator Family Unit," throughout this study to describe the changing features of the agrarian economy. The changes took place during a transitional period which still continued at the end of 1975. The transition linked two major economic sectors. These were the traditional (sometimes called "pre-industrial") and the modern sectors both of which might be referred to as "economic dualism". The major characteristic of the traditional sector was that it employed comparatively a high level of family labour with no or very little external income per head. Normally, it operated on subsistence level; on a very small-scale with little capital and mostly employed the use of primitive tools such as cutlass, hoe or digging sticks.

The important features of the modern sector, which was believed to have commenced significantly in the early post-war II period, included its diversified programmes geared to large-scale production by the use of machinery and other farm inputs through the availability of capital from financial institutions;[1] ancillary services such as transport or electricity and a somewhat organised but largely unskilled labour with fairly high income per head.

The crucial issue about this economic dualism hinged on the problem of transforming the predominantly traditional sector into a large-scale modern structure. We assumed that it was through the transformation process that the wide gap which existed between the income groups could be narrowed. In the final analysis, the hypothesis is applied even to embrace the modern sector since in the Ghanaian situation none of the large-scale modern undertakings which existed was completely independent of the traditional sector. There were imperfect specialisation of labour employment in the economy. The farmers would often grow foodstuffs and cocoa while traders, fishermen and even artisans might work the land.[2] The high incidence of unskilled labour in the modern sector contributed to general inefficiency and there-

fore comparatively low wages. The theoretical assumption is that in the wage sector of the economy labour was generally remunerated on the basis of its marginal productivity value.[3] In view of the low reward for labour services, workers would be compelled to find other avenues to supplement their income in order to make a living. Some of the alternative employment were casual or seasonal jobs on peasant farms, in trade, artisan or village handicraft. Altogether, these workers formed the labour force of the modern sector. They also played an important role in the peasant cultivator family unit; sometimes working as wage earners in the modern sector, and sometimes assisting in farm operations during peak periods. Another salient point which would not render the modern sector completely independent was that the property rights of land ownership system were rigidly subjected to the limitations imposed by the institutional arrangements and traditional customary laws. Again, there existed no complete specialisation among the production units in the modern sector to the extent that while one production unit was in or nearing a stage of modernisation other units remained in the traditional conditions. Hence the hypothesis embraced the whole economy.

The hypothesis suggests that land was abundant in the sense of unrestricted use of it because population was sparse. A peasant depended upon his own labour and the help of his family to grow food. He turned a few acres of land into cash crop farms as the main source of family income. His economic needs were essentially tied up to the level which could maintain himself and those of the family household since he had in practice a limited knowledge for improvement of the traditional cultivation methods. Under certain conditions, the cultivator was exposed to calamities such as periods of famine, epidemic diseases as well as uncontrollable natural farm disasters like drought, flooding, crop pests and diseases. By considering all these factors, the chances of the economic survival of the family unit were slim. However, the obstacles were counter-balanced by the existence of high soil fertility in the abundant virgin land for cultivation. Whatever level the food production was it helped, at least, to maintain the family unit. Any attempt to step up production beyond the family subsistence level meant bringing more acres of land under cultivation; a target which could be achieved primarily by either increasing the size of the family unit or by getting additional supply of labour from outside. While the former led to natural increase of the population the latter was met by waves of immigration. The two factors exerted pressure on the land. The population pressure brought about increased activity relative to the increased economic needs

of the society. The solution to the problem of increased economic demand was found in trade and commerce.

The empirical approach of the hypothesis lies in the historical development of the major cash crop. The best virgin land was in Akwapim areas during the early part of the century when cocoa cultivation started. The cultivation continued steadily until it was later interrupted by the depression and the war crisis. The crisis slowed down all economic activities but the population growth continued. The rapid growth of the population was not known until the first official census was carried out in 1948.

The post second world war policy of the government was to restore the cocoa industry and the economy as a whole. In response to the new policy, the farmers realised that the best cocoa farmlands had been used up and that it was necessary for them to move to other areas. The areas were parts of Ashanti, Western and Brong Ahafo regions. The new cites were in remote areas far away from the villages and towns. The families decided to save travel time by taking settlements near their farms in the new forest areas. When the first cocoa farms showed signs of high yielding, more lands were brought under cultivation with additions of settlements of family units. The villages grew in size and later became important trade centres for both rural and urban populations. Although the transport system had not been substantially developed to connect the rural areas with the urban centres, the increase in population made head-load transportatin possible to support trade and commerce. For example, cocoa were conveyed on "head-loads" from the remote areas on the country side to the railway stations and ferry ports. The conditions encouraged the intensive use of human labour.

Another important aspect of our hypothesis is that the increase in numbers of the family unit was faster than the rate at which they could be absorbed into the existing farm and other occupations since the increase resulted in cocoa land shortage. The land shortage, in turn, suggested that all marginal lands were brought into use with improvement of cultivation methods and tools. Large tracts of land for other crops were cleared by means of farm machinery to substitute for the intensive use of manpower. The surplus manpower, comprising mainly the younger generation resulted in rural-urban migration which was reflected in the growth of the urban centres. However, comparatively very few of those who could not join the rural-urban movement

were occasionally employed as wage-earners on the large-scale commercial farms.

References

1. Banking and Insurance facilities, etc.
2. See Seidman, A.W. - Ghana's Development Experience - p 15.
3. See Szereszewski, R. - "The macro-Economic Structure" - in "A Study of Contemporary Ghana" - Vol. I - p 77.

Chapter 3

SOME THEORETICAL ASPECTS OF LAND PROPERTY RIGHTS*

3.1 Introduction

The post-war II period has been one of increasing argument about traditional theory of production and exchange. Many writers have given the subject different interpretations among which is the notion of property rights assignments. This is a new analytical approach which, according to Furubotn and Pejovich,[1] "seeks either to supplant the classical economic theory or to extend its scope". In this connection, when the strategy of land ownership, (as exists in Ghana or elsewhere in Africa) is carefully examined, property rights become the main point in the analysis of this production factor as a means of resource allocation and income distribution. People may be involved in the process of resource allocation and income distribution in various ways. Let us consider the case of Agriculture not only because of its close connection with land but also because it is the most important sector in the economy of Ghana or Africa as a whole. The system of money economy that emerged after the Second World War has compelled farmers (landowners and tenants, etc.) and the rest of the working population to "seek to establish their access routes to the annual income flow or the Gross National Product (GNP)". Access to the future flow of income in any society has two dimensions:

(i) establishing the initial access route, and
(ii) ensuring the continued security of such route.[2]

The cultivator family units and other users of land may seek to establish their access route to the annual income flow by tilling the land. Since land itself is not productive, they combine this basic factor, with other factors - capital, labour, and skill in varying proportions. In doing so, the cultivators fulfil two basic principles of economics - "proportionality and equi-marginal returns". This means, in practical terms that, the cultivator is

---

*The concept used in the discussion of this subject is taken from Peter Dorner, "Land Tenure, Income Distribution And Productivity Interactions" - Land Economics 40 (1964) - p 249. The present author adds his personal field experience as Agricultural Officer, Ministry of Agriculture, Division of Economics and Marketing, Ghana.

much concerned with the amount of input of each of the factors and his success of judgement regarding quantity/quality and best management in doing that yields him some reasonable returns or profits.

By realising profit from the use of land, the cultivator will be interested in the ownership of it; a decision which he may take in two directions. Firstly, he takes into account, among other things, size, location, the physical properties of the land, etc. At this initial stage, land becomes a raw material in the production process. The cultivator wants to know whether it is dry land or water-logged so as to calculate with the costs involved in under-taking the future irrigation and drainage development. The soil fertility regarding the humus content, soil texture; diseases and pests in the area are some of the important information that will help the cultivator to make a better 'site selection' of the land from his personal experience and judgement he can see whether he has a chance for profitable investment. It is assumed that he has; and so he takes a firm decision to acquire the land; but he has not yet acquired it.

Secondly, the cultivator wants to know the bundle of rights which constitutes property in the land so as to count on time dimension within which he can seek to establish the initial access route to the national income flow. The bundle is called "estates" because "the land itself is one thing and the estate in land is another; for an Estate in land is time in the land, or land for a time and there are diversities of time, for he who has a fee simple in land has a time in the land without end".[3]

The security of land-use depends upon the bundle of property rights. Thus the cultivator will want to know whether the costs of the bundle of rights are as high as the fee in land. Are the bundle of rights for long term or short term duration? He will like to know further, to what extent are the bundle of rights legal and how the legal aspects conform to the social norms of the area? He knows that the bundle of rights granted him will constitute his property so he will investigate again whether his bundle of rights undermines others or vice versa? The cultivator's position becomes insecure when his bundle of rights are likely to be in conflict with those of his neighbours, especially the first settlers of the area. The cost of maintaining land is expensive and may not be undertaken unless there are signs of security in ownership. Demsetz[4] observes, "property rights are instruments of society and derive their significance from the fact that they help a man

form those expectations which he can reasonably hold in his dealing with others".

3.2 The concept and role of Property Rights in the Social System:

By combination of other production factors on land, the cultivator is able to establish the initial access route to the national income flow. The next stage is to seek to establish a continuing and lasting security of such access routes. We have shown how important are the physical aspects of the land and their potential contribution to its future development. Equally of much importance to the cultivator is the institutional framework within which society allows him to hold and use his land. His property rights of land must have the consent of his fellow men to avoid future conflict and allow him free interactions on the land. The cultivator expects the community to prevent others from interfering with his interactions, provided that these interactions are not prohibited in the laws or customs granting the rights. Dorner[5] puts it differently, thus: "the availability of the initial access routes as well as the developed capacities of individuals to exploit them (the security of access) is a function of the particular institutional arrangement of the society".

By institutional arrangements as applied here, means in Commons',[6] words, "the working rules of associations and government which when looked at from the private viewpoint of the individual becomes the sources of his rights, duties and liberties as well as the protected liberties of other individuals". The bundle of property rights in land should be capable of being challenged by others because they have scarcity value and the institutional arrangements will influence the security of the access route of the cultivator. Moore[7] points out, "a right is meaningless unless there are potential challenges to that right". The challenges will arise when there comes a scarce value of land; as when population increases with corresponding increase in demand for land; all marginal land being brought into use in the localities where economic activities tend to be highest. The example is the cocoa farmlands in the Eastern Forest Zone of Ghana. In other areas where the population is sparse, "free access to land is tantamount to ownership, and there is not sufficient pressure on the land to prompt people to concern themselves with legal title to holdings which remained uncontested".[8] But where the population is dense, a limit to the challenge has been placed by interactions of land ownership systems and patterns of land-use in Agricul-

ture. We have already explained that through some land ownership arrangements cultivators manage to establish their initial access routes and ensure security of such routes into the stream of national income flow. It may be right to assume that, there is a close relationship between any system of land ownership, productivity and income distribution in Agriculture. For proper evaluation of ownership systems it is necessary to distinguish between customary tenures and modernised tenure systems. The customary tenures have some specified principles of land transactions to ensure fair distribution, proper working rules and husbandry practices or restrictions of taboos, religion and superstitions as may be imposed by local beliefs. In a modernised tenure system, the working rules and sanctions are defined in the Acts of parliament by the State. While the working rules of customary tenure systems vary from one area to another, those of the modernised tenure systems are somewhat uniform over wide areas. In view of the conformity and coherence of modernised tenure systems there seems to be a gradual change from the customary tenure systems to the modernised systems in most African countries. The main drawback in such a change which is taking place in Ghana, for example, is that the modernised systems are automatically rendered illegal unless they fulfil certain conditions imposed by the customary tenure. Thus in theory there is no modernised land tenurial system.

3.3 Land Tenure System

Land tenure is not the same as land ownership. The latter is one important aspect of the former and therefore both are closely related. "Ownership", according to Famoriyo,[9] is "the conditions that affect land use invariably affect the tenure of land so that we recognize a reciprocal relationship between land use and land tenure".

In Ghana, a cultivator may own a piece of land of which he has ownership rights to so long as he cultivates it but not tenurial rights; he has "the exclusive right to benefit from produce raised on a given plot".[10] Land tenure systems are, therefore the customary, or legal rights which regulate ownership and control of use of land. Parsons's[11] definition is that, "a system of land tenure is systematisation of the rules which function by specifying what different classes of persons may or may not, must or must not do, with reference to the occupancy, use, abuse or disposition of land". In theory, there is no outright purchase of land in the european sense in Ghana; because the existing land tenurial systems postulate that land is not

saleable; but no one should be deprived of land-use.

In all farm operations tenure systems are likely to influence the production structure and the patterns of land use. The production structure in the context of, "the nature, type, and *modus operandi* of the actual production process in direct relation to size, location and shape of the production unit and its internal organisation and management".[12] Land tenure systems can influence the organisation of farms by placing constraints on production possibilities on the land regarding the time dimension (as implied in estates) and security of the initial access routes of cultivators. A land tenure system can therefore affect these routes and ensure or distort a fair distribution of national income flow (GNP) which farmers can expect as farmers and which also is the expectation of the workers in other occupations. La Anyane,[13] considering the constraints that the land tenure systems in Ghana impose on farmers, has suggested that the systems must be changed.

3.4 Communal Ownership of Land

In traditional areas in Ghana, like any other part in Africa, communal ownership of land is common in all tenurial systems. Demsetz[14] has described the system as one in which "the community denies to the state or to individual citizens the right to interfere with any person's exercise of communally-owned rights". It means that the bundle of rights are communally-owned and even those by which the cultivator seeks to establish his access routes to the stream of annual income flow are part of those belonging to the community. They are granted in a private capacity because it is rather the community which recognize the rights of the cultivator to prevent other people from interfering with his private rights.[15] Although in Ghana, all lands are communally-owned, it does not mean that plots or parcels of land are held in common. The communal ownership splits from the traditional lands through clan lands to family or company (not in the sense of limited liability company) lands down to plots of peasant cultivator family units. According to FAO Report,[16] "the common elements of existing tenures are not easy to describe. For the most part they may be called communal in a sort of negative sense; that is to say, no single individual has the right to a particular piece of land which enables him to sell it or give it away outright and forever". The principles of communal ownership system are so complicated that they hinder economic development. In Ghana, there are large tracts of unused land lying idle but unless somebody makes an attempt to clear an acre or

two, the landowner is scarcely known. In his studies, Gildea[17] observed, "free land does not exist although there is much idle or fallow land. Since land is ancestral property, it can never be 'sold' in our (european) meaning of the word. There is no property right in the matter of private ownership. Only transitory proprietorship exists". Biebuyck[18] describes African communal land ownership system as, "partition of land between segmenting groups and various, often unconditional transfers of land between related and unrelated groups, though ritual exchange, symbolic sale, loan or mortgage were also current; but outright sale was exceptional. In great a many instances rights in land in either well-defined areas or in vaguely separate tracts, were vested in villages, lineages or other descent groups, represented by their headmen, seniors or counsels". Accordingly, a proper test of Ghanaian nationality is for a person to name the clan to which he belongs and he must be able to trace his ancestral lands. Hence, there is a saying, "there is no Ghanaian without land".

On the basis of African communal ownership system, we can assume that it is easy to establish the initial access route to the stream of annual income flow by owning land. In fact, it was so in Ghana during an historical period when the money-economy of the country emerged with new approaches to cocoa cultivation. The establishment of the initial access routes took place mainly with cocoa production under traditional economies on peasant cultivator family unit basis. According to Parsons,[19] "these economies were pre-capitalist, pre-market, pre-literate and pre-state, and they were devised without the benefit of economists, or scientists or capital equipment beyond home-made tools".

The traditional communal tenure systems defined the patterns of land-use and the cultivation methods adopted. Where the system of tenure did not aim at conserving the fertility of the land and other natural resources so as to secure an economic distribution of their use over time, methods of cultivation were defective.[20] There was a traditional system of farming with favourable Man: land ratio. The existing conditions gave rise to the practice of shifting cultivation with long fallow periods of say, 20-30 years. It was so, because land was not a scarce factor. What was needed was one's own desire and ability to clear a large acreage. It was easy therefore, to establish the initial access route to the traditional economy. The conscious desire to secure this initial access route would be zero since the man: land ratio was favourable. The abundant supply of land would also mean, on one

hand, that no serious concern would be expressed regarding the physical conditions of the land (soil-type, etc). On the other hand, social norms such as taboos, superstitions, ritual beliefs which restored power and dignity to the traditional chief or owner of the land ("Tindana") would be strictly observed while the working rules like those which restrict strangers' entry into the land would be relaxed. It was because for some political and defence reasons, the larger the size of the community the stronger the power and authority that would be restored onto the Head or the military leader of the community. In this context, the whole institutional framework tended to be strengthened and not weakened.

There are also some tendencies which, if not checked, are likely to undermine the whole institutional framework of the system of communal ownership of land. This is particularly where a traditional chief may offer a part of communal lands to strangers either by purchase or on long-term lease basis without the consent of the members of the community. In Ghana, such actions cause conflict between members of the community and their traditional Heads. There is a case in point, in Ghana. After the 1966 coup, the military government sold a large number of the state farms in the country to private companies. One of the farms was the "Minimaso State Farm Corporation" which was sold to the Pioneer Farms (Ghana) Ltd., an American Company. According to the Report which appeared in the Ashanti Pioneer Newspaper:[21]

> "a consideration fee of ₵ 10,000 was paid to the Ejurahene (a traditional chief of the Area) and his elders by the Company for a leasehold of five-mile square land. Since Some of the farmers who enjoyed the right to the use of part of the land for cultivation under the customary tenure system appear not to have been consulted nor given any compensation prior to the acquisition of the land, the transaction is being challenged.
>
> Although the granting of the 50-year leasehold to the Company by the Ejura chief and his elders was supported by the Government, because of the protest of the farmers whose land fell within the five mile square area, the Government has been forced to set up a Committee (Adadevo Committee) to inquire into allegations that the Ejura chief and his elders have 'contrary to Ejura customs wantonly sold large tracts of rural land including villages and farm lands in the Ejura traditional area without reference to or consent of the inhabitants and farmers of such land or the people of Ejura, in a manner highly prejudicial to the welfare and interests of the inhabitants and farmers and to the Ejura stool."

According to one of the witnesses to the Committee, "the Ejurahene (chief) and his elders ought according to custom to have summoned the people by gong gong to get their consensus opinion, but this was not done".[22]

In Ghana, it takes a long time for reports of Committees of Inquiry such as the Ejura's case to come out; but even so, the fact that the Government felt a need to appoint a Committee to investigate the farmers allegations underlies the difficulty and the uncertainty which characterise the communal land ownership system, particularly where acquisitions of large tracts of lands are concerned. According to the customary land tenure system, no member of the land-owning group can be dispossessed of his right to use a piece of land he has claimed for himself and negotiation for either a leasehold or direct purchase of any large tract of land would involve many people. The experience of the Pioneer Farms (Ghana) Ltd., is sufficient to demonstrate that it is difficult for an entrepreneur to ascertain whether his title to a negotiated piece of land would not be challenged, in due course, by individual members of a land-owning group who may not have been consulted at the time of the leasehold agreement. The findings of the Committee of Inquiry of Ejura case will be important since they will throw light on the strengths and weaknesses in the customary tenure system, especially in relation to the acquisition of large tracts of land by non-members of a land-owning group. It also reflects some of the hindrances which the system places on agricultural development in Ghana.

The writers who have carefully studied the African customary tenure systems have predicted that in view of the growing of social and economic pressures the systems cannot remain as they were in the olden days. Malinowski[23] says, "obviously in Africa the old tribal level cannot remain as it was, though for the time being it may survive in some places. The level must sink or rise, and the systems of land tenure and territorial adjustments ought to be framed so as to be adjustable to a higher level". The adjustments have taken the course of usufructuary rights. Pogucki[24] commenting on principles of rural land tenure in Ghana, wrote, "there are usufructuary rights which can be treated as equivalent of a freehold, because they embody the powers to sell, because they are inheritable and because they are held in perpetuity". The usufructury rights are the actual land rights which are gradually replacing the traditional customary land rights. The real land rights are embodied in the land-use patterns practised by the cultivators. Nukunya[25] commenting on the Anlo system of land tenure in Ghana wrote, "the ultimate title in the land is vested in clans or lineages, and it is as members of these descent groups that individuals acquire their shallot plots". This means that the usufructuary rights in land are enjoyed by all members of

the farming community and not only the clan and lineage groups who have absolute title to the land.

The utilitarian rights sometimes become permanent rights. There is a saying in Akan that, "the land belongs to he who cultivates it". Once an individual establishes his right over a piece of land by growing permanent cash crops no person can cultivate that piece of land without his permission. Hence strangers are forbidden to grow perennial cash crops in areas where they may be allowed to farm temporarily. The best example of permanent utilitarian rights of land in Ghana is the cultivation of cocoa. The farmers knowing that cocoa is a perennial crop which comes into bearing five or six years after planting and which remains in bearing for about 30-40 years on good soil, will seek to establish their initial access route to the stream of annual income flow by growing this crop on newly acquired lands. The cocoa trees serve as "bench marks" of their utilitarian rights on the land. The increase in participation of growing cocoa in an area means that all the physical aspects of land for growing cocoa will be vital importance to the cultivators since the longer the period cocoa trees remain on the land the more permanent are the utilitarian rights (bundle of rights) in their landed property. In this context, cocoa land values are determined by demand and supply forces operating in the land market under competitive conditions,[26] and the more the cultivators the less favourable the man: land ratio for growing cocoa in the area. The tendency has been that cultivators have to move to other areas of more favourable man: land ratio for growing cocoa.

The farmers' "push-pull" actions on the land means that the establishment of the initial access routes to the stream of annual income flow through cocoa farming has also varied from one locality to another depending on number of factors; local customs, particularly those pertaining to land alienation have legal recognition of the state. When all these factors have been tested and weighed against the background of investment in good land, the cultivator will proceed to establish his initial access route through cocoa farming by means of one of the following methods of land acquisitions:

3.5 Types of Land Acquisition*

1. PURCHASE

The land is purchased outright normally from a Chief or the Head of the Chief-Makers (*Abusua Panyin*) with the customary rights commonly known as "*Taama*" performed. This land transaction system is practised in the Eastern, Central, Western and Volta Regions. The value of the land depends upon these factors:

(i) Fertility

Land is not homogeneous in quality; fertility differs from place to place and knowing that an acidic and sandy soils cannot support an economic permanent crop like cocoa such lands sell relatively cheaper.

(ii) Locality

The nearness to the town or market: Lands suitable for growing arable crops sell at higher prices than those which are sited far from market centres.

(iii) The Demand for land

If the demand for cash crops grown on the land increases, the growers or producers clamour for more sites to expand their production of the crops and their actions will account for higher land prices.

The purchase system is though often more expensive than all other systems, it is the best of the lot, because of the following reasons:

(a) The owner has an absolute control over the land which accounts for a higher degree of incentive (Economic freedom and Financial inducement).

(b) It assures a continuous flow of the services of the land for production.

(c) The buyer has a choice in site selection.

(d) It affords security in old age, because of its permanent access to legal status of producer.

(e) The land can be pledged as security for capital to boost production.

---

*Culled from the present author's own notes prepared from a class lecture while he was a student of Agricultural Mechanisation and Farm Management at the University of Science and Technology, Faculty of Agriculture, Kumasi/Ghana - 1963-1964.

(f) It raises the social status of the owner in that it gives him sufficient room for planning on permanent programme of work for an increased productivity and results in permanent abode or second homes. Many villages in Ghana have originated from land purchases and resettlement.

(g) The estate can pass on to heirs.

(i) The land owner has the freedom to sell the crops on the land.

The shortcomings of the purchase system are as follows:

(a) The built-in inheritance tendency divides the holdings especially when primogeniture (right of succession by the eldest child of the family) is not practised - Fragementation of holdings results.

(b) There is a monopoly on the purchase of land. One producer may own more land than necessary and future generations who may be equipped with scientific methods of farming will have difficulty in getting fields to farm.

(c) There is temptation, as the owner is not controlled and therefore may mortgage his property for other purposes, and not for farm development.

2. SEMI-PURCHASE - "NTO"

This system is practised on all stool lands, especially in Ashanti and Brong Ahafo Regions. A reasonable amount is initially charged for the land by the chief or the Head of the Chief-Makers (Landlord) with the understanding that when the crops come into bearing a fixed amount is paid annually to denote that the producer is not the absolute owner of the land. The annual fees were formerly going directly into the pockets of the landlords until recently when the government proclaimed that a fixed amount of ¢ 0,50 per acre is charged. This amount goes to the coffers of the Local Council of the area from where the landlords receive fractional amounts.

This system provides for the following advantages:

(a) All access is given for the fullest exploitation of the land, but less permanent building structures are often put up.

(b) The land can pass on to heirs.

(c) There is less firm security in old age.

(d) The land can be pledged as a security for capital to boost agriculture without the consent of the landlord.

The shorcomings of Semi-Purchase - "NTO" System are:

(a) The initial fee chargeable is not fixed by the Government and the landlord may charge exorbitant fee to compensate for the loss due to the Government enactment governing the annual fee.

(b) The annual fee may be increased from time to time by the Government.

(c) Outright resale of the crops on the land cannot be undertaken without the consent of the landlord.

(d) Land disputes are inevitable - Litigation.

3. GIFT:

This system is practised all over the country. A landlord or the Head of a Clan can present a piece of land free of charge to a prospective producer when the producer belongs to the same clan - For example, "Asuana Clan". Drinks and a sheep may be provided by the producer for the performance of the customary rights. The provision of drinks and a sheep often become a yearly affair and offered at the time of festivities such as "Odwira" or "Adai Afahye" or "Ohum".

In the North and Upper Regions, though all lands are controlled by the Central Government, some Royalties and Rights are vested in the various Skin-Heads (Tindana) who offer the lands to the producers free of charge. However, these Skin-Heads or Native Authorities have no power either to give out land for a more permanent ownership or to concessionaires. It is for this reason that there is no litigation over land in the North.

The problems with it are listed below:

(a) There is too much dictation by the Head of the Clan (Landlord) for example, the funeral donations for deceased members of the Clan are to be met compulsorily by the producer.

(b) Arable crops become the main produce; less attention is given to permanent structures or crops as a new head of the Clan may easily depose the producer of the land.

4. SHARE ("Abunu or Abusa")

This system is practised all over Ghana. The share system may be (1/2 or 1/3 share) in the form of:

(i) Cash Crop

Only cash accrued from the sale of the produce is shared either equally, "Abunu" (1/2) or "Abusa" (1/3) of the produce goes to

the landlord; depending upon the agreement previously reached.

(ii) Crop Share

Tenants may give a share of the produce physically to the landlord either by "Abunu" or "Abusa", whatever the case may be. Alternatively, permanent crops (e.g. Cocoa) are often shared whilst growing in the field at bearing stage or earlier stage to allow the tenant to care only for his portion and the landlord to take care of his part.

The problems involved in the share system are:

(a) The extent of the farm-land is likely to be limited by the labour-strength of the tenant.

(b) Usually, it is the landlord who decides the type of crop to be planted.

(c) The landlord chooses his portion of the share farm first and may choose a better side.

(d) The tenant has no chance to put up permanent structures.

(e) "Planning Ahead" is limited

5. SHARE-CROPPER - "NHWESO"

A landlord employs a cropper on growing permanent crop, such as cocoa. The cropper receives a share of the produce as "abusa", but in this case contrary to ordinary share system, the smaller fraction (1/2) goes to the cropper and (2/3) goes to the landlord. At times a fixed amount is paid to the producer for a specific weight of the produce known as "Nkotokuano". For example, two cedis (¢ 2.00) is paid to a producer for a load of cocoa. The system is practised only on permanent crops of cocoa, coffee, oil palm and coconuts.

The problems in this system are:

(a) The cropper focuses his attention on the produce and not on the growing crops as he seeks only for a cash income and as a result growing crops deteriorate year after year.

(b) The landlord who should direct the cultural measures may himself be an absentee farmer and sooner the farm fails to be an income-fetching entity.

6. HIRE:

This system is practised all over the country. Farm land may be hired from a landlord for farming purposes, for a length of time at a price. Hiring agreements may be renewed from time to time, as long as the

landlord permits. The farm produce is solely for the producer.

The problems in this system are:

(a) Arable crops are usually grown on these lands as long as the landlord wishes and he may refuse to permit the producer to farm at short notice.

(b) Subsequent renewal of agreements may cost more than the initial agreement when the landlord sees that the producer has the chance of earning more; the landlord basing his estimate on the previous crop.

7. LEASE

This is almost the same as the hiring system, but the time span is longer (usually 55 to 99 years). There are provisions for renewal of agreements. After the initial bulk charge by the landlord, (Chief or Head of a stool land or the Government). There are yearly negligible fees payable to the landlord to denote ownership of land. Lands can be fully exploited due to the longer time involved.

8. CO-OPERATIVE SOCIETIES

The Co-operative farming system introduced into the country by the Government get their lands through:

(a) Individual farmers grouping their lands together.

(b) Gift of lands by landlords, usually chiefs.

(c) Hire or lease lands at almost negligible costs.

These gestures will not continue for ever. There is bound to be a change of attitude by landlords and this calls for adjustments to suit conditions favouring diversified agriculture.

3.6 Security in Land and Productivity

People who acquire land for farming are interested mainly in the productive potential of the land because it is the land resources that offer them opportunities for income and employment. As farmers, the security of their initial access route is sought through a means of obtaining regular, secured and sustained productivity since it is this which determines their share of the national income flow or GNP.

Land tenure arrangement or working rules can affect productivity and therefore indirectly or directly the initial access route. Some of these arrangements are as follows:

(a) Extortionist Arrangement in obtaining the 'shared route'

The cost of this initial access route varies widely in different parts in Ghana. In some cocoa growing areas the cost is so high that it leaves the sharecropper very little profit after deducting the labour cost of the farm. For example, when the 1962 Rents (Stabilization) Act under which a 'stranger' cocoa farmer was required to pay 5s. (¢ 0.50) for every acre required for cocoa cultivation to the Revenue Collectors of the Stool Lands Secretariat (Ministry of Lands and Mineral Resources) was replaced, land owners arbitrarily introduced a new system. A sharecropper paid "abusa", ten loads out of every 100 loads of cocoa produced. This arrangement is quite unfair.

(b) Uncertainty about the cost of the entry

Agriculture like any other business enterprise demands planning. Farmers would like to know the size of their capital structure so that they can plan ahead before each season starts. Since farmers are to operate their holdings within the confines of law, they must know what the law is. Arbitrary introduction of laws as in the example cited in (a) above will tend to affect their initial entry and uncertainties put upon their expectations will be a handicap in the farm enterprise.

(c) Uncertainty and insecurity of expectations due to defective titles

Though the introduction of cocoa has brought about different methods of land acquisitions, titles to land are still obscure and defective. It is argued that it is a better system of individual ownership of land that can lead to registration of land titles. The argument points to the fact that, "wherever it is possible to establish permanent farms with a settled farming population, the traditional land tenure systems may become an obstacle to economic progress".[27] As early as in 1936, Shephard[28] observed that the main obstacle which debarred farmers from getting agricultural credit in Ghana (Gold Coast) was lack of registration and titles to land. According to Poehl[29] "the combined effect of the inability of an alien to own a freehold and the need for family consent has proved to be a serious obstacle in the path of the foreign investor who responds to the Nigerian

drive for industrial development".

The insecurity of expectations through defective land titles is a reality but mere individualisation of titles to land and their registration do not solve the problem. There are a number of other measures which can be put into operation, short of individualisation of titles to remove insecurity through defective titles.[30] Can it be argued that lands that cannot be used as security for loans because titles to them are not individualised, is responsible for low productivity in Ghanaian agriculture? The experience elsewhere suggests that there is a marked reluctance among rural landowners to borrow money on their land titles, because they hold their lands "in terms of prestige which far outweigh their negotiable economic value"[31] and, they will borrow money through other means; not through land. It would appear that ease of acquisition rather than individual ownership of land will go a long way to removing the uncertainties of expectations in the security of the access routes for agriculturists.

(d) Lack of resource-availability

We have demonstrated the need for proper combination of production factors, (Land, Capital, Labour and Skill) in the farming process and that the cultivator's level of efficiency will determine the size of his return or profit. It means that availability of markets and facilities for transport, etc. help to make the establishment of the access route easy to obtain and secure when so obtained.

In Ghana, the impression about the peasant farms is that yield is low and attempts are made through agricultural extension services to increase yield on farms by introduction of improved seeds, fertilisers and planting methods but less attention has been paid to finding out the volume of production and the proportion of it that goes to waste on farms for lack of adequate transport facilities or markets. No farmer will be inclined to produce more unless he has a means to transport and market his produce. Killick's[32] study suggests that as much as 19-37% of the foodcrops produced in the forest zone is wasted every year as a result of inadequate facilities for distribution and sale. This

means that development of infrastructure, particularly feeder roads leading to farms as a necessary requisite for availability of resources of effective sale and distribution will make farmers feel more secure with regard to their access to income flow through increased agricultural productivity. Boateng[33] claims that, "if the maximum distance over which farm produce can reasonably be overloaded from the farm to the nearest road or railway is about three miles, then Ghana with its land area of 92,000 square miles would require a combined road and rail mileage of approximately 30,000 miles in order to have an effective network for the needs of the farming industry". It means that easiness in the process of land acquisition is not a means to an end of solving production problems on farms. Improvement of infrastructure and market intelligence would help to establish the cultivators' access route to the stream of annual income flow or GNP.

(e) Impact of Class Structure on the Community

Unless the land ownership system in Ghana is viewed from the angle of the class structure of the society it would be difficult to understand why the small land holders are the most active farmers of the rural population. The reason cannot be well explained by any of the factors listed above since these are the group of holders who have limited resources for farm investments. A large proportion of big landowners are themselves non-participants in farm operations but hold large tracts of unused land which provide them with prestige, political and economic status. "The prestige and power appears to be forthcoming irrespective of levels of productivity. The major economic interests of the owner are frequently located elsewhere. The resources are sufficient to provide the customary income even if used extensively, and it is apparently simpler to manage at that level."[34]

The evaluation of property rights to land has been centred mainly on cultivation of cocoa because historically, it was through cocoa farming that the important aspects of tenurial systems became known. The impetus and motivation for a change from traditional farming took its drive by means of the income earned from cocoa farming. Had cocoa cultivation been the only aspect of agricultural development, Ghana would have solved the major part of its

farming problems. Unfortunately, Ghanaian agriculture does not stop at cocca production which has done very well for the country. Attempts at agricultural modernisation must essentially, be aimed at finding better solutions to the existing systems of land ownership so as to reach the required level of production in livestock and staple food-crop sectors.

Lewis,[35] examining the problems of Ghana's Agriculture, commented:

> "The trouble with Ghana's agriculture is not that we have too much cocoa, but that we do not have enough of other things. What we seek is not a substitute for cocoa in the cocoa belt but ways of making the rest of the country more productive."

3.7 Conclusion

In our preceding normative and empirical analysis of Ghana's economy we stated that the basic problem of the country's economic dualism lies in the transformation of the traditional sector into a large-scale commercial modern structure. It is by means of increasing output per head of the farm population relative to the increased use of the combined resources employed in the modern structure, that the existing wide income gap between the rich and the poor could be narrowed.

This hypothesis pre-supposes that any concern about the development of Agriculture makes it clear that the existing land ownership systems cannot be allowed to take care of themselves. Land tenurial arrangements play important role in agricultural production through the effects of the farmers' attitudes towards land improvement. The effects are essentially the security of land occupancy, an equitable distribution of farm income between landowners and the cultivators, the expectation of a reasonable reward for the farmer's labour and the pride of ownership of the land. These are some of the important powerful economic stimulants which are not only for land improvements but also which ensure the right type of investment towards the wise use of available resources to increase output by means of the farmer's willingness to accept advice and apply improved methods of cultivation.

Until such time as a formula is found and worked out to define and apply a better system of land ownership, we shall lay the blame of the low agricultural output in Ghana at the door of the existing native institutional and land tenure arrangements.

References to Chapter 3.

1. Furubotn, E.G. and Pejovich, S. - "Property Rights and Economic Theory: A Survey of recent literature, in Journal of Economic Literature - December, 1972 - Vol. X, No. 4 - p 1137.
2. See Dorner, Peter - "Land Tenure, Income Distribution and Productivity Interactions" - Land Economics - 40 (1964) - p 248.
3. Cheshire: Modern Law of real Property, 1962 - footnotes - p 100.
4. Demsetz, H. - "Toward a theory of Property Right" - in American Economic Review - May, 1967 - p 347.
5. Dorner, Peter - op.cit. - p 249.
6. See Commons, J.R. - "Legal Foundations of Capitalism." - 1958, Chapter 5.
7. Moore, W.E. - (As quoted in V.C. Uchendu) "The Impact of Changing Agricultural Technology on African Land Tenure" - in Journal of Developing Areas IV (4), July - 1970 - p 478.
8. Inter-American Economic Affairs - Vol. 3, No. 4 - Spring, 1960 - p 53.
9. Famoriyo, S. - Ghana Social Science Journal - Vol. 3 No. 2 - Nov. 1976 - p 17.
10. See Melville J. Herskovits - Economic Anthropology - p 368.
11. Parsons, K.H. (Prof.) - "Customary Land Tenure and the Development of African Agriculture" _ 1971 and "Institutional Aspects of Agricultural Development Policy" - in Journal of Farm Economics, - December, 1966 - p 1185.
12. UN/FAO: Land Reform. Land Settlement and Co-operatives (1), 1970 - p 2.
13. See La-Anyane, S. "Ghana Agriculture" - p 191.
14. Demsetz, H. - op.cit. - p 354.
15. All property rights theorists such as Furubotn, G., Pejovich, S., Coarse, R., Demsetz, H., etc. seem to agree on this point.
16. UN/FAO: "Progress in Land Reform" - 4th Report - 1966 - p 40.
17. Gildea, R.Y. Jnr. - "Culture and Land Tenure in Ghana" - in land Economics, 40 - p 102.
18. Biebuyck, Daniel - "Land Holding and Social Organisation" - in Economic Transaction in Africa - Herskovitz and Harwitz (eds.) - p 105.
19. Parsons, K.H. - op.cit. - p 1185.
20. See Wills, J.B. (ed.) - Agriculture and Land-Use in Ghana - p 34.
21. The Pioneer, Wednesday - March, 24, - 1971.
22. See Ibid.
23. Malinowski, B. - "The Dynamic of culture and Change" - As quoted in Gildea, R.Y. Jnr. - op.cit. - p 137.

24. Pogucki, R.H.J. - "The main principles of Rural land tenure" - in Wills, J.B. (ed.) - op.cit. - p 180.

25. Nukunya, .K. - "The effects of Cash crops on an Ewe Community" - in "Changing Social Structure in Ghana" - Jack Goody (ed.) - p 62.

26. See Ronald, R. Rene - Land Economics - p 518.

27. Kamarck, A.M. - "The Economics of African Development" - p 106.

28. See Shepard, C.Y. - Report on the Economics of Peasant Agriculture in the Gold Coast.

29. Proehl, P.O. - "Foreign Enterprise in Nigeria" - pp 141-142.

30. Woodman, G.R. "Land Law Reform: Reducing Insecurity of Title" - 1 and 2 in Legon Observer - 111/22, pp 6-9 and 23, pp 7-11.

31. Inter American Economic Affairs - Vol. 13, No. 2 - Autumn, 1959 - p 35.

32. See Killick, Tony - "Agriculture and Forestry" - Chapter IV of "A Study of Contemporary Ghana" - Birmingham, Nuestadt and Omaboe (eds.) - op.cit.

33. Boateng, E.A. - "Agricultural Practices and population Growth" - The Ghana Case - p 6.

34. Dorner, Peter, - op.cit. - p 251.

35. Lewis, A.W. - "Diversifying Ghana's Agriculture." - in Bulletin of Ghana Geographical Association, 2, - 1958 - p 4.

PART II - PRIVATE OWNERSHIP

Chapter 4

PRIVATE UNIT HOLDINGS

4.1 Introduction

In chapter 3 we stated that communalism is the basis of land ownership system which derives from the customary laws and beliefs of the people. Accordingly, the chiefs are in full possession of tribal lands and they exercise control of them on behalf of the community and that no member of the community is deprived of its share of the land. The communal ownership of the land does not mean that it "should be cultivated collectively".[1] The community own the land but it is cultivated on small family unit basis. A cultivator family unit usually comprises of a man, his wife and children who pool their resources (land, labour and capital) together in order to make a living. The family holding is a landed property. By tradition, it is supposed to be indivisible but may pass on to future generations. The traditional rules governing the ownership of the holding tend to be weakened by the increase in the members of the family unit and the relative increase in their economic demands. Accordingly, changes have occurred in the structure of the family holdings.

In this chapter we shall show that the changes that occurred in the family unit affected also the sizes of the holdings which were obstacles to agricultural development. The assumption is that because of small sizes of farms, there were dis-economies of scale of operations in the sense of both land-use and labour employment on the holdings. On the land only traditional methods of cultivation were used and with labour, no more than seasonal unskilled types were employed. The traditional methods could be used for cultivation of plantation crops such as cocoa because of its inherent limit to the use of farm machinery, etc. When the time came for the farmers to change over from traditional to scientific methods of cultivation in order to increase production of other crops, there were difficulties. The sizes of farms were small for economic use of machinery and there was also no skilled permanent labour for farm operations.

The government was aware of the problem. It attempted to change the condi-

tions by re-settling some destitute communities on more fertile areas with allocation of fairly large size farms to the family units. Each family unit was to join a co-operative society within which it could acquire the habit of scientific methods of farming by actively participating in the co-operative daily activities. Had the government succeeded in its policies, there would have been a significant change from the traditional to modern system of farming. Unfortunately, the policies were all a failure owing to some political and social influences on the family unit.

4.2 Sizes of farms

Many writers have expressed concern about the sizes of farms of the family unit holdings in Ghana. Beckett's[2] impression of the cocoa industry is that farmers operate on small holdings. Valley and White[3] observe that, "the average area on each holding is two acres". Boateng[4] shares the same view that, "cocoa is usually grown on small farms of from one to two acres". Polly Hill[5] writes, "the average size of all farms has never been known, is virtually unknowable; to ask what the average size of farm is for the country as a whole is as absurd as to enquire: 'how large are the animals in the London zoo?'" The impressions of all these writers are correct; they may also not deny the fact that the sizes of farms are never static and that the farms continue to change as the members in the family unit increase. Even in the early decades in this century, there were large farms. Reports show that, "establishment of large peasant holdings started about 1920 in the Easten Region and about 1930 in Ashanti and Trans-Volta (now Volta Region) and in many places far from village centres large holdings up to 50 acres are common. Even during this early period a handful of farmers in Ashanti had farms exceeding 100 acres each".[6] Again, in recent years, official data[7] indicates that the condition of small-scale cocoa holdings in the country has changed but the impression is that with the rate of population increase these large farms are likely to be fragmented into sizes which will impede agricultural development. According to the official data, 292,600 holders owned more than 3 1/2 million acres of cocoa farms but the over-all average acreage per holder in the country was only about 12 acres. Table 1 shows the distribution in the Regions and districts.

Table 1

Number of Holders Growing Cocoa - Regions/districts in 1970

Region & District	Holders Growing Cocoa		Area Cocoa per Holder (acres)
	No.	%	
WESTERN REGION:	40,200	59	9.5
Takoradi	3,500	18	6.9
Tarkwa	9,000	59	9.6
Other Areas	27,700	82	9.8
CENTRAL REGION:	42,100	52	6.4
Cape Coast	13,900	49	7.6
Swedru	14,100	43	6.0
Esiam	14,100	71	5.7
EASTERN REGION:	68,800	46	8.1
Asamankese, Kibi, Tafo	31,400	71	6.3
Koforidua	5,700	46	18.8
Akosombo, Somanya	3,300	13	4.8
Greater Accra	2,900	11	4.5
Other Areas	25,500	67	8.7
VOLTA REGION:	27,700	26	5.2
Ho, Sogakofe	9,100	27	2.3
Other Areas	18,600	25	6.7
ASHANTI REGION:	77,600	53	22.1
Western Kumasi	25,700	57	20.7
Eastern Kumasi	17,300	48	35.3
Mampong	10,500	50	15.1
Bekwai	19,100	54	8.4
Kumasi City	5,000	48	50.2
BRONG AHAFO REGION:	36,200	51	14.4
Goaso, Sunyani	28,200	70	11.0
Other Areas	8,000	26	26.3
TOTAL GHANA	292,600	36	12.3

1. Source: Report on Ghana Sample Census of Agriculture - 1970, Vol. I - Economics & Marketing Division, Ministry of Agriculture - Accra, March - 1971 - p 69.

The interesting information in the data is that about 5,000 holders who own 50.2 acres each live in Kumasi city. The average area of cocoa per holder growing cocoa is also high in Western Kumasi (20.7 acres) and Eastern Kumasi (35.3 acres).

Another change that has taken place from small-scale to large-scale farming of cocoa can also be judged from the point of view of the crop-yields from

the farms. In 1963 Beckman[8] examined the purchasing records of the cocoa farmers in Ghana and found 5% of the farmers sold over 200 loads[9] of cocoa each. These farmers' quota alone accounted for 31% of the total sales in the country for that year. On Regional basis, 7% of Ashanti farmers sold over 200 loads each to account for 35% of the total Regional sales. In Brong Ahafo, 7% of the farmers sold over 200 loads accounting for 38% of the Regional sales. The figures are quite impressive and good indications of large holdings because on the basis of an average farm size of 12 acres[10] per cocoa farmer in Ghana and a load of cocoa being 60 lb, each of the farmers in Beckman's sample exceeded the average yield of 330 lb. per acre[11] of cocoa in Ghana.[12] Thus 200 loads would be the yield from 54.5 acre farm.

Even Beckman's analysis probably understates the contribution of the large-scale farmers since it does not take into account the sales of the same farmer in different districts and/or Regions. For instance, if a farmer made sales in two districts or Regions, in Beckman's sample, the farmer is in effect counted as two farmers.[13] Dispersal of farms belonging to the same holder is an important aspect of cocoa farming in the country. According to Census Report,[14] Eastern and Ashanti Regions have 15% and 17% respectively of their holdings dispersed over more than one district. In Eastern Region most of such holders have holdings restricted to Eastern Region but in Ashanti Region 11% of all holders have part of their holdings in another Region. Nearly 25% of the holders in Koforidua District in Eastern Region have holdings scattered over more than one district, and more than one-half of the holders in Kumasi City have holdings in this category. Again, the Report states further that, the 35,000 holders who had their holdings in two Regions, the location of the part of the holdings was in a Region other than that in which the holder lived. The majority of the holders in Ashanti with farms in another Region have these farms in the Western Region. The holders in the Eastern Region with farms in another Region are rather evenly distributed between holders with farms in Western, Ashanti and Brong Ahafo Regions. Table 2 is Beckman's own classification of cocoa output in his sample.

Table 2

Distribution of Cocoa Output - 1963/64

Class	% of Farmers	% of Output
Under 10 loads	18	2
" 20 "	38	7
" 40 "	60	18
" 100 "	15	54
" 200 "	5	31

Source: As quoted by Ewusi, Kodwo - "The distribution of monetary incomes in Ghana" - Technical Publications Series No. 14 - ISSER - Univ. of Ghana, Legon, 1971 - p 74.

By considering the yield of cocoa farms as explained above, it is seen that there are large holdings but crop-yield on farms is not constant. Since the fertility of the soil, diseases and pests, etc. are likely to affect yield, it means that the sizes of farms in terms of yield may dwindle from time to time. Of course, there are measures that can be taken to counter-balance the decline in yield of the crop but the measures may be expensive and time consuming and unless the government takes up the responsibility itself, the farmers may be discouraged and give up cultivation of the crop and perhaps abandon the area of farming entirely. In that case, forest land becomes wasted and the farmers' reaction will increase the problem of future development of the land.

There are several other factors which may also account for the sizes of farms of the family unit. The first is the development pattern. The family holding varies within wide limits and the variation reflects changes in the historical development of the cocoa industry from small holdings around the village to large economic units some distance away. At the earliest beginnings cocoa was planted in small food farms surrounding the village. The family unit was small and necessarily limited to the size of farm the members could establish. But with the economic development which prevailed a small farm could produce enough cash returns to satisfy the small needs of the family. The small sales of foodstuffs in addition to the seasonal earnings from the few cocoa trees brought in an income. In course of time, the savings from the monetary returns from the small farms encouraged the family to plant larger farms away from the food farming areas surrounding the town.

The next task was to clear another forest land and the size of farm was limited by the amount of work the family could do. Hired labour outside the family (mainly from the Northern Region) was to be employed and farmers who had saved sufficient money were able to clear and plant one or more large farms further afield. Up to this stage, the members in the family unit had been steadily increasing because the higher the number of the members, the larger the size of the family holding. Cocoa cultivation had proved to be an invaluable occupation of the family. It's demand for more labour attracted workers not only from the Northern Region but also from outside Ghana. The impact of the population pressure in the cocoa areas began to be felt. The shifting cultivation of food-farming which preceeded the growing of cocoa had contributed to the rapid exhaustion of soil nutrients and therefore quicker use of forest lands. In consequence farmers in possession of capital mostly obtained from sale of cocoa and food crops moved from their home towns usually in groups, to distant areas and acquired large tracts of forest lands for cocoa cultivation. By means of a such development pattern the family unit holdings were bound to range from small to large to begin with, but their subdivision on the death of the head of the family unit again reduced even the size of the large holdings.

Okali's[15] recent study of some family unit holdings illustrate the stages of changes from small-scale to large-scale cocoa farming. The study is based on the farming activities of five separate holders who live in a village about 25 miles from Goaso in Brong Ahafo Region. These holders were selected purposely for the study on the basis of their contribution to cocoa production in that village during the 1970/71 crop year. The cocoa sales from the 5 holders were in the range of 325 loads to 875 loads. Altogether, they contributed 76 tons or 17% of the total cocoa sales in the village. The labour employed on some of the farms were on share-cropping basis. The categories of the holders are as follows:

Table 3

Characteristics of Farmers and Holdings

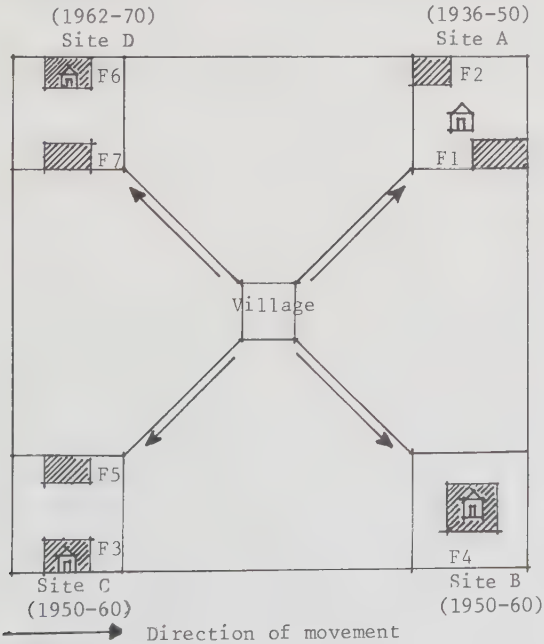
Farmer	Origin of farmer	Age of farmer	No. of farms	Loads Produced 1970/71	No. of care-takers	Average gross income of care-takers*
1	Native	62	7	875	9	264
2	Native	55	4	542	5	289
3	Migrant	52	3	428	6	190
4	Migrant (female)	48	4	325	3	289
5	Migrant (absentee)	58	3	680	7	259

*Calculated at 1970/71 prices, assuming an *abusa* agreement.

Source: Okali, C., Owusnamsah, M., Rourke, B.E., "The Development Patterns of cocoa Holdings...." Economics of Cocoa Production - Legon, April, 1973 - p 174.

Fig. 1

Development pattern of farms for farmer 1



Note: Not drawn according to scale

Source: Okali, C. and others - Ibid. - p 174.

Upon interview, the three Migrant holders stated that they came to the area in the 1950's when the area had been opened up by Timber Companies.[16] The native holder acquires land within his customary rights, that is, as a member of the communal land holding group.[17] The migrant farmer buys his land from the chief.[18] The native holder started to develop his cocoa farm with very little capital.[19] The migrants, on the other hand, had capital accrued to them from their previous occupations at their home area.

Now Farmer 1, a native farmer (see table 3) with very small initial capital started his first clearing, (F.1 at site A as shown in Fig. 1).[20] The size of the first clearing was about five acres. As time went on, he was able to earn income from this small farm for re-investment in about eight years time. Again, by this time, the farm had reached a stage when it could be used as a security to contract loans.[21] About the early part of the post-war II period, the earnings from his small farm had helped the farmer to employ hired labour to double or even triple the annual clearings of the size of the initial farm. Another factor mentioned as inducing an increase in the acreage cleared in any one year was that of an increase in the demand for land, and therefore the need to claim ownership by planting as quickly as possible. The producer price for cocoa which almost doubled in 1945 from the previous year encouraged farmers to expand their farms. The increase in demand for land also meant that all unoccupied lands surrounding farms already planted were being occupied, and F2 was therefore started about half a mile from the first farm.

The development on F2 continued in the order of 10 to 51 acres cleared per annum while clearing of F1 alternated in a two-year cycle. When clearings were made in the same year on both farms, the size of the clearing on F1 was inversely related to that on F2. This pattern was followed up to 1950 by which time the farms at site A were surrounded by those belonging to other farmers and farms 3 and 4 were started at sites B and C respectively. Clearing on these farms continued until about 1960 on the same style. The rate of the development of new farms in the village was at its peak during this period, because of improvements in road communications which facilitated the arrival of strangers including those who wanted to acquire land for farming and others who opted to work as farm labourers.

During the early sixties, F5 and F6 farms were started at new site D. Since 1970, F7 has been the major focus of the farmer's activities, again at Site

D but one mile distant from F6. New clearings since 1970 average around six acres per annum.

Farmer 2, operating in three of the same sites as Farmer 1, has a similar pattern of land development. Two of his farms are at site A, one at site C and the last one including his more recent clearing are at site D. His most recent clearings are between three and five acres but are made only once in every three years.[22]

Upon interview, the two native farmers (Farmers 1 and 2) claimed to have become indebted as a result of their farming activities during the period, 1950 to 1960. They attributed this to several reasons. They had no real savings with which to begin their cocoa holdings; their initial working capital was therefore borrowed. It has already been mentioned that farmer 1 made initial clearings of about five acres when he started his holding whereas his average annual clearing ten years later was double this amount.[23] Again both farmers complained of the increasing scarcity of family labour and therefore the increasing need for cash to hire labourers. The case of the first native farmer (Farmer 1) was very sympathetic. According to him, he had repaid loans amounting to £ 6,000 in the form of mortgages, long, medium and short term loans as a result of investment in his farms.[24]

In short, the pattern of farm development practised by the two native farmers was that in which only one piece of land could be developed at the same time. It was because they had no initial working capital and had to clear sizeable portions of land every year by means of borrowed capital.

By contrast, all the three migrant farmers had capital to start their farm operations. The development pattern of farmer 3 is typical of migrant farmers in the cocoa growing areas, in terms of his access to land. He acquired a piece of land, about 120 acres at site C in 1950.[25] By 1957, the whole land had been brought under cultivation at the rate of 15 to 20 acres per year. He spent five more years to maintain this farm and then moved to acquire a second piece of land of approximately 75 acres, at a distance of about half a mile from his first farm - still at site C. Maintenance work was then focused on this farm. Farmers 4 and 5 developed their land in similar way. Farmer 4 has two bearing farms at site C, while farmer 5 has two farms at site B and one at site C.

The sole aim of the migrant farmers was to establish clear rights to the use of land in a situation where demand for new land was increasing rapidly, and resales by the chiefs of unestablished land[26] were possible. No member of the community showed opposition to the rapid resales of the community lands. This was because the policy of resale was justified by the land holders on the grounds that the land was acquired for the purpose of cocoa establishment. It must be remembered that, in an area where annual rent is imposed only when the cocoa trees are bearing, non-establishment of farms means a loss of income to the community. Against this background, is also the fact that a rapid claim to land, and therefore the need to cultivate large acreages annually is only possible where working capital is readily available,

All the three migrants had working capital either from already established farms elsewhere or from their business concerns. Farmer 3 by 1950, before he came to this village, had an established farm which was realising about 300 loads annually. He was again, a storekeeper. Farmer 4 acquired one of her farms from a dead husband who also had developed the farms at this site from the money obtained from the proceeds of farms in his home town. Farmer 5 was a commercial transport owner prior to the time he started cocoa farming in this area. It was however of interest to note that none of these stranger farmers was in a position to purchase and establish two separate farms simultaneously. Presumably, they could only do that by mortgaging part of the land they had already purchased.

The development of the five holdings was successful because of the help of paid annual and contract labour used for clearing the new farms and by passing bearing farms to crop-share caretakers. Farmer 1 employs six annual labourers in addition to nine caretakers. The farm owners were, thus, left with supervision of labour, management of the activities on the new farms and harvesting of the bearing farms. Whereas small-scale farmers are unlikely to be in need of hired labour throughout the year, large-scale farmers cannot afford to loose labour at any time of the year. Caretakers too, may be unlikely to leave a farm of large size which gives them high income unless they themselves want to acquire their own farms.

Normally, caretakers are assisted on farms by their wives, relatives and other members of their family; in addition they may employ extra labour, this was the case. Thus in calculating net returns for the caretakers, the cost of this labour, plus food and drink for those who helped to break the

cocoa pods must be deducted from the gross income. Other costs like the spraying of the farms were borne by the farm owner and need not be deducted from the caretakers' gross income.

Table 4

Acreage and yields per caretaker

Farm	Age of Farm	Measured acreage	Loads produced	Yield per acre	No. of care-takers	Acres per care-taker	Loads per care-taker
1	25-30	23.6	305	12.9	3	7.9	102
2	20-25	11.3	48	4.2	1	11.3	48
3	15-20	55.0	300	5.5	4	13.8	75

Source: Okali, C. and others - Ibid. - p 174.

Yields and acreages per caretaker for three of the farms measured in this survey are as per Table 4. The first farm has a high yield per acre. The yields are low in the last two farms. The second farm, belonging to Farm 2, was suffering from capsid damage at the time of the survey. The third farm belonging to farmer 3 contained a fair amount of cocoa either not bearing or not fully bearing. Farm 3 was the only one containing Amazon type of cocoa in any substantial amount; and the yield might increase in the future.

The case studies of the five farmers has clearly demonstrated the patterns of change from small-scale to large scale farming. In all the stages of the changes, land is not a problem in the investment activities, even where there was no outright purchase. The serious problem appears to have been capital. However, all the farmers, whether local or not, were willing to take risks, to the extent that they were anxious to borrow money even at the prevailing high interest rates. Once the decision to develop a farm was taken, planting continued until the land was fully developed, in spite of price fluctuations during the period and the fact that farmers 1 and 2 had invested no capital in acquiring the land. It is usually claimed that smallholders plant small, geographically dispersed areas to spread risks. However this practice does not seem to apply to the five large-scale farmers considered. Even though the two local farmers do have scattered farms, the size of each farm is large. It is common to look at yield per acre when assessing the liability or otherwise of cocoa farms. In the case of large

farms a more suitable measure might be the returns per man hour. Labour is used more extensively on these farms and the return per caretaker is high. In a situation where labour shortages are the most pressing problems on farms, it is important to consider this measure alongside that of land.

The second factor which also accounts for sizes of farms is disintegration of holdings of family units. In the earliest period when the money economy had not fully established itself, a holding was unique and indivisible landed property for a family unit. It means that it was held in the common ownership of all members of the family unit. With successful introduction of cocoa followed later by its commercial influence, common ownership of holding began to change. Women began to engage themselves as independent producers. They acquired their own land and had full responsibility for development and managerial decisions without assistance from menfolk, although they might happen to be married or widowed.

When the members in the family unit had increased to a certain level there was also a corresponding increase in their economic demands. The women and the eldest children[27] became concious of the risk of insecurity involved in their rigid membership in the family unit. Apart from the economic problems, there were also social implications. Knowing that by custom,[28] a wife had no inheritance rights over the landed property upon the death of her husband, she would manage to acquire her own land for development. She could certainly not be debarred from her actions because the institutional arrangement was such that women had equal chances to men to acquire land. The change was a consuetude one and even Polly Hill[29] suggests, "where land is increasingly alienated by sale women's rights over land tend to increase so that it is their husbands who should beware".

In Ghana, women holders are seldomly known. It is because, though they are independent holders, they usually operate their holdings under the "shadow" of their husbands or uncles. This is merely a cultural trait and inherent respect of wives for husbands and not for fear of taxation as certain writers are inclined to suggest. Even the wealthiest woman will not like to claim that she owns properties by herself and not the husband. The women holders are not so indebted as the men and therefore little is known about their financial standing. Women do not show keen interest in co-operative farm organisations. They usually employ caretakers to take charge of their holdings while they are on their husbands' farms or operating business as traders

elsewhere in the urban areas.

Although the information about women holders is scanty, some records suggest that they were present at about the beginning of this century. A small survey[30] conducted by the Department of Agriculture at Ashanti-Akim indicated that out of the many cocoa farmers (no number was given) in the area 22 per cent of the farmers were women. The information added that women owned fewer farms per head than men and their farms were smaller, so only about a tenth of the whole cocoa acreage was owned by women.

Beckett[31] also claim to have found during 1932-1935 in a small cocoa growing area at Akokoase, in Akim Kotoku 104 "female independent farmers", as against 163 "male independent farmers", as well as 76 "dependent women farmers" who did not own the farms but had a life interest in their husband's or father's property taking the whole of the cocoa for themselves. The number of "dependent men farmers" was only 11. Another source of information which gives vivid impressions about women farmers is the 1948 Population Census.[32] It states in general terms that in Southern Ghana, a woman who lives outside the municipalities, large towns and the fishing areas is a farmer and not a trader. It adds that in the southern areas, particularly Eastern and Togoland (now Volta) Regions there are more women food farmers than men. The census reports that there are also more women than men cocoa farmers in Effiduase and Suhien (both in New Juabin) and in Asamankese and Kibi (both in Akim Abuakwa). The report does not give any information about Ashanti and Western Regions neither does it indicate which of the farmers mentioned are independent holders.

Table 5 is taken from the 1960 Population Census. It gives an impression of the number of women cocoa farmers in the various Regions. It does not distinguish between dependent and independent holders.

Table 5

No. of People Engaged in Cocoa Growing by Sex and Region - 1960

Region	Male	Female	Total
Western	81,920	35,760	117,680
Accra*	1,400	220	1,620
Eastern	73,960	34,300	108,260
Volta	33,710	10,360	44,070
Ashanti	112,960	44,910	157,870
Brong Ahafo	69,670	22,780	92,450
Northern*	380	20	400
Whole Country	374,000	148,350	522,350

Source: 1960 census of population - Advance Report - Table 32.

*These figures presumably relate to people who undertake cocoa farming in a Region other than the one in which they were enumerated.

The sources of capital formation, structure and development patterns of an independent woman holder can be traced back from Okali's[33] case study. The only woman in his sample is a widow and migrant farmer who took over the holding from her deceased husband. By classification, this woman is a large-scale independent holder; her case may be taken as a typical example of all large-scale independent women holders in other districts or regions, except that, unlike this woman, some of them may be married or divorced but not widowed and therefore, initially acquired their holdings themselves. In that case, they must have started their holdings on a small-scale and gradually ascended to the class of large-scale holders.

The small independent women holders have limited sources of capital. In the absence of gifts from relatives their process of capital accumulation is a slow one; but it is upon this process and their determined abilities to take decisions and bear all risks as independent holders that we may judge them. On the family holding unit, there is a complete division of labour between the husband and wife. Capital accumulation comes out of this labour specialisation. Traditionally, the man has the responsibility of the cocoa cultivation as the main source of cash income for the family. The woman grows the foodcrop for the family subsistence and sells the surplus on local market. "An elderly chief in Akwapim referring to this traditional situation said, 'the men are attached to the land, they own it and clear it; the woman are attached to the food, they grow it, process it, cook it and sell it."[34] The mutual arrangement of the wife helping the husband in certain operations

during peak periods and the husband assisting the wife in some difficult tasks is implied in the chief's statement.[35] A greater part of the woman's capital is accumulated from the sales of the surplus foodstuffs.

Women may also get financial support to invest in their proposed projects (as mentioned above) by means of gifts or loans without interest from close relatives (usually sons and daughters) who may be traders in the urban centres. Institutional credits usually do not attract women farmers because of the rigid conditions attached. When in dire need, women may pawn their old farms for money from local money-lenders for further investment, but even so the agreement is likely to be made in the name of the husband, uncle or other close male relatives.[36]

Farming in rural Ghana is seasonal, having its main peaks and slack periods. During the peak period, women are busily occupied; working partly on their own farms and partly assisting on husbands' holdings for unpaid services. In the slack seasons, women become actively involved in what is to-day called in Ghana as "Agro-business". They may collect firewood from the forest and prepare charcoal for sale to the urban population. This is a good source of income because transport owners come to the villages to buy the bulk to transport them to the cities for resale. Women in the villages are, again obliged to undertake off-seasonal work in dyeing and weaving of cloths, fishing in ponds and rivers or even in pottery as sources of income.

The capital then, required for investment becomes partly the function of savings from all these economic activities. When the savings are added together women suddenly become in control of substantial amount of capital. Since by custom, wives scarcely contribute to the "family budget" they are sometimes in better positions, even than their own husbands concerning investment.

The small-scale independent woman's holding varies from that of her husband. The variation lies in the structure and development patterns. Even though the woman may be in possession of reasonable amount of capital she is reluctant to clear a large acreage from the beginning. This will give an impression of the capital she controls. She decides to clear a small plot as a food farm and later inter-plant it with cocoa. As a woman certain routine operations are beyond her capabilities and she needs to employ hired labour at regular intervals. By deciding to be an independent holder the mutual

labour co-operation between her and the husband is impaired. She will not ask the husband for regular assistance in certain operations. This means that unless small-scale women holders are able to employ regular hired labour or *nkotokuanomen*, their holdings are usually in small, patchy and woody form.

4.3 Tenant Holders

The growth of population during the post war period brought about a relative increase in the number of people within the cultivator family unit. This resulted in a substantial fall in the man: land ratio, especially in the areas where the soil for cocoa cultivation was suitable for farming. The depression of the thirties and then the war affected the economy to the extent that only a few of the people had enough capital to reinvest in farming. Owing to the population increase many people were landless. Even those who owned land had no capital to develop it. It must be recalled that cocoa cultivation was a lucrative occupation for the rural community. The landless class of the community could earn a living through farm employment. Many of them were compelled to work on the farms as wage-earners and others who intended to be cocoa farmers decided to work as caretakers. A sharecropping system which had almost died out during the depression period was revived in all parts of the cocoa growing areas. The relaxation of war-time restrictions on import and export and special incentives given to the farmers to step up cocoa production encouraged them to expand and develop more farms. The farmers' enthusiasm of investing in this sector of the economy came at a time when farm labour was readily available. The main sources of labour were the family and the migrant types. There was an adequate supply of family labour but it was necessary to supplement it with migrant labour because native farmers employed the latter on casual or caretaking basis in order to devote their time to establishing new farms.

Many agricultural economists have looked askance at sharecropping as an inefficient way of organising agricultural production. Even the views of the few writers who disagree on that point have not been widely accepted. Again, certain writers consider sharecropping as an alternative form of farm labour only. Our analysis extends far beyond this periphery. Judging from the fact that by means of sharecrop arrangement a tenant may own land by himself, a sharecrop system can be regarded as a means of resource allocation for the family unit. We may disagree with those who allege that sharecropping is

inefficient in organising agricultural production since from the historical experience of Ghana, the system has helped to increase cocoa production. However, it has the disadvantage of reducing sizes of farms through share ownership. Let us consider a sharecropping system as a type of farm labour. This is the common system which most writers refer to.

In a sharecropping system, a tenant supplies his labour, and in some cases other farm inputs for a share of the crop. In all cases, the landowner provides land. The terms of the share contract may be between two or more parties. The parties agree to privately owned resources for the production of certain mutually agreed outputs. The outputs are shared either in cash or in kind according to certain agreed percentages as returns to the contracting parties for their productive resources.[37] All such farming arrangements within the cultivator family unit are known as sharecropping.

The observers of African farming systems would like to know whether the sharecropping system is typical of a pattern of African traditional farming. The system was in practice in many parts of the world during ancient times. It is known to have taken place in certain areas in Europe. For example, as far back as the twelve century the system was in force on some manors. North and others[38] report on the vineyards of France, where a sharecrop arrangement developed as a third form of contractual arrangement on the manor after the systems of commutation and the lord's leasing out of portions of their demesne for a fixed rent payment.[38]

Sharecrop labour is the common type of farm labour agreement in the cocoa producing areas. It has traditionally played a very important role in Ghana's cocoa industry. The production record of the industry in the sixties was due partly to the major contribution of sharecrop labour. A cocoa farmer concludes a sharecrop agreement with a labourer or caretaker once the cocoa farm is bearing. The arrangement enables the farmer to concentrate more on the development of a new farm which requires his personal attention during the initial establishment. It is important to arrange with a sharecropper to take over all the responsibilities of the old bearing farm particularly where the site of the newly established farm is far away from the first one. The most common sharecrop agreement is known as *abusa*. "The *abusa* system involves a tripartite division of the returns from the sale of cocoa beans in which the labourer receives one-third and the farmer two-thirds."[39] The sharecrop arrangement may vary from district to district. In some districts

either of the two other systems known as *abunu* and the *Nkotokuano* are used. The *abunu* system is that the farmer and the sharecropper divide the proceeds from the sale of the cocoa beans equally; that is one-half share each. Different sharecrop arrangements are also known to be in force in other parts of the cocoa belt. Interviews with farmers during the 1970 agricultural census[40] in certain parts of the Ashanti and Eastern Regions, showed that when a farm is undertaken from the early growing stage of the cocoa trees the caretaker is entitled to *abunu* share of the proceeds from the sale of the cocoa beans until the farm comes into full bearing when the caretaker's share reverts to the usual one-third share. Polly Hill[41] also reports of a bit different sharecrop arrangement. According to her, when a labourer helps to establish a new cocoa farm, he is entitled to all the cocoa plucked from the farm at first, until the trees come into full bearing before his share falls to the traditional one-third share. The *nkotokuano* system involves the payment of a fixed sum of money for each load of cocoa produced on the farm. The system seems to have originated from Akwapim where cocoa was first introduced and spread gradually to other parts as a result of migration. The *nkotokuano* system is mainly confined to parts of the Eastern and Volta regions where migrant farmers dominate. The *nkotokuano* labourer usually receives less than the *abusa* labourer since the former has fewer obligations to the farmer. Following the large exodus of migrants from the country on the 1969 Aliens' Compliance Order, the *nkotokuano* men have almost disappeared.

By sharecrop arrangement the sharecropper takes over all the responsibilities of the labour functions on the farm. The functions include the brushing of the under-growth, control of pests and diseases, harvesting of the crop and the general sanitation of the farm. A sharecropper is usually assisted by his wife and children and/or may occasionally take on some casual labourers to assist in the operations. It is always the case on large farms during peak periods. In exceptional cases, the sharecrop agreement stipulates that such casual labour costs are borne by the sharecropper and the farmer. In such a situation the farmer is entitled to a share of the extra earnings derived from the sale of food crops on the farm. This condition of the agreement is likely to be reached where the farm is newly established, and there is evidence of young cocoa trees inter-planted with food crops to serve as a temporary shade. In a matured cocoa farm the owner's main interest is in the yield and it does not bother him if the sharecropper fails to render regular accounts of the sale of a few food crops. On these farms sharecrop-

pers bear all the labour costs themselves since there are no food crops growing and the labour functions are the major obligations to which they are committed. It is difficult to assess the annual earnings of sharecroppers. These depend on the yield of the cocoa trees under their care. Sharecroppers start with low earnings but later earn more as a result of hard work and better management of the farm. Many sharecroppers may decide to supplement their income by doing extra work as casual labourers on their neighbours' farms or engage in part-time work of artisan type like tailoring, black-smithing, carpentry, etc.

From the beginning, sharecropping system was known only in the cocoa growing areas but it extended gradually to other parts of the country as well as also in different operations of farming other than cocoa. In cocoa farms a sharecrop arrangement could be made for the harvesting of the cocoa pods. The arrangement emerged as a result of the large expansion of cocoa farms. In large farms, it was difficult to pluck all the ripe cocoa pods within a reasonable time. Cocoa beans germinate in pods when plucking is delayed. The agreement for sharecrop harvesting of cocoa could be *abusa* of the harvested crop, in kind or in cash. A survey[42] carried out in 1969 in Axim, Tarkwa and Atieku districts in the Western Region showed that there were sharecrop arrangements for the harvesting of rice. Rice farmers arranged with labourers to assist in harvesting as soon as the crop was ready in order to avoid the damages caused by birds and dislodging of plants by floods. The traditional one-third *abusa* system prevailed but sometimes the seriousness of the damage and the need for early harvesting compelled farm owners to accept *abunu* arrangements. In all cases, payments were in kind from the harvested paddy and not in cash. Upon interrogation a labourer, a mine worker who was doing the harvesting on part-time basis, said that he gained more by selling his share of the paddy privately on the local market than if he had received cash payment from the farmer. According to him, he could on some occasions store his share of the paddy when he felt the price on the local market was low and would sell his stock during the period when the price was high. In that case, he could gain more than three times as much in cash than if he had accepted cash-payments of his share from the farm owner at the harvest time. Besides the harvesting, the combined operations of threshing, cleaning and winnowing of the paddy were usually done on a sharecrop basis mostly by women and children. The sharecrop arrangement was one-third share in kind of the cleaned rice and not in cash. Uchendu and Anthony[43] also report labourers getting one-third of the produce

for the harvesting of groundnuts in the Bawku District. Similar observations were made during the 1970 survey[44] for rice harvesting, mostly by women, in the Volta Region and for pepper harvesting on the Accra Plains. All the above-mentioned sharecrop arrangements take place purposely for the needs of labour on the farms.

A sharecrop ownership system is another important aspect of the tenancy in Ghana. It differs from that of sharecrop labour in the sense of its sole objective of procurement of land for farming. To distinguish between the two, it is necessary to recognise the main different purposes. The sharecrop ownership system has not been explored. On communally owned clan land, a member of one family may permit a neighbour of the same clan but from a different family to establish a farm in the former's ancestry land. The sharecrop arrangement restores rights to a share of the cropped area. The sharecropper establishes the farm and bears all costs with the landholder providing only the land. It is a tradition that the area be divided into three parts; the sharecropper receiving two parts and landholder one part. Such sharecrop arrangements poses no problem since both parties belong to the same clan and own the land communally.

By means of this sharecrop arrangement, the landless sharecropper has virtually been able to procure land of his own thereby elevating himself from the class of landless to that of the landowners in the community. The action is another cause of fragmentation of holdings which we have already mentioned earlier, in that it is an obstacle to agricultural development. The obstacles lies in disputes of ownership and over farm boundaries. During the time of this land transaction when all the parties involved are alive there may be no problem. After a long period when new generations come to take over the landed property, the farm boundaries may have disappeared completely. This system of land transaction is likely to cause disputes. It may embrace an alien sharecropper who does not belong to the same clan. In that case, his position of part ownership of the land becomes insecure since upon his death the members of his family are likely to be evicted from the land by the ancestral owners. The system leads to quarrels and long-standing litigation over lands. The sharecrop ownership system is popular within the Akan tribal lands and it is no doubt that it is the area where land disputes and litigations are the commonest in the country. The system is practised when an entirely new, distant, area is to be developed. Most Akan landholders are unwilling to move for settlement far away from home. Owing to

this tendency Akans have lost extensive areas through outright purchase by migrant farmers. During the post-war II period when economic value for land became highly important in terms of cocoa cultivation, the Akans resolved to the sharecrop ownership system as a means of upholding the clan lands within their community. The Asona clan lands in Affram Plains were developed under this system after the war when no road was accessible to the area. During the sixties, a feeder road was constructed and a ferry provided on the Affram River to solve the area's isolation problems. As the population of the area increased the practice of the system declined. Rourke and Sakyi-Gyinae[45] also cite an instance of sharecrop ownership in the Volta Region. They saw a practice where the flooding of Akosombo Dam had led farmers to enter into sharecrop ownership agreement in order to procure land.

The practice of sharecrop ownership is popular among the annual crop[46] farmers. Landholders conclude agreements with sharecroppers, the former providing only land and the latter providing his own labour services, and other inputs. Nukunya[47] reports on two main systems which operate in the shallot farming of the Ewe community. The systems are knwon locally as *dame* and *fame*. In the first one, the owner of an unprepared plot grants it to another person to cultivate and the harvest is shared between the two in the ratio of two to one in favour of the tenant. In the second, a farmer who has already prepared his plots but finds that he has insufficient seeds for all, hand them to another who provides the seeds, sows them and maintains the crop. The harvest is then divided into two half. In the case of *fame*, the general understanding is that the transaction is for that season only, although there is sometimes the need for renewal. This procedure regarding termination applies in the annual crop farming in other parts of the country but differs from that of tree crop cultivation in the forest zones. For one of the principal conditions of this kind of tenancy in customary law is that what is given can never be taken back again from the person to whom it has been given so long as the tenant recognises the ultimate title of the owner.[48] In the districts where land is scarce the transaction is made only on the understanding that it is for a specified time and no more. This is understandable in view of local conditions and the temporary nature of annual crop farming. The conditions which exist in certain parts in the forest zones are different. The farmers who give out land usually have enough to spare and can afford to do without the plots so long as their share of the harvest is assured. In areas along the large lagoons and lakes individual holdings are not only small but also where natural disasters like floods abound, it is necessary

to have an arrangement like the present system of share tenancy by which a farmer afflicted by any of these misfortunes can seek assitance without necessarily alienating his land. Moreover unlike the popular tree crops, annual crops take only a few months to mature, so that labour costs and other activities associated with it are quite different and present a different set of problems altogether.

Harvesting of cane-sugar is another difficult operation on the farm. It must be done within certain time limit after the cane matures otherwise the sugar content declines. This factor compels farmers to take on sharecrop harvest contracts with labourers. In view of the tediousness of the operation and the reluctance of labourers to readily offer their services the sharecrop arrangement tends to favour the sharecropper more than the farmer. Thus *abunu* share in kind of the harvested canes and some commissions is not uncommon. The practice is popular with Asutuare sugar-cane family unit holders.

It has been suggested that within the peasant cultivator family unit a sharecrop arrangement may involve the landholder on one hand, and a sharecropper including his wife and children, on the other hand. It is not surprising that sometimes the sharecrop arrangement tends to be between the man, where he is the landholder, and the wife with the children. Many women sharecroppers in cocoa and other farming communities are involved in the share contracts in this way. The sharecrop ownership arrangement is also popular in those farm operations which are best performed by women and children. The processing and marketing of farm produce are typical examples. In the coconut and oil palm plantation areas women and children are the most popular sharecroppers. They process oil from copra and palm fruits. The husbands do the harvesting of the fruits while wives and children undertake the extracting of the oil. The sharecrop arrangement is one-third share in kind of the sealed tinful of oil; each tin containing four imperial gallons of oil.

The marketing of farm produce for which women are responsible is sometimes on this type of sharecrop arrangement.

Another development of sharecrop ownership has taken place in timber production. The conveyance of timber logs by man-power to the central loading stations in the forests has been replaced by machine power. A highly powered tractor known as a "Timber Jack" is devised to pull any size of log

in the forest. The price of this tractor is so high that only few people, not necessarily timber merchants, can afford to buy them. The tractor-owners make a deal with the timber exploiters under sharecrop arrangement to use the tractor to pull as many logs as possible to the central loading station. The sharecrop arrangement is *abunu* share in kind of the total logs pulled to the station.

A sharecrop ownership system is also common among fishermen in the coastal areas. Along Keta lagoon, landowners offer small plots on temporary basis where fish fences and traps are used to catch fish on a share basis.[49] Even with canoes, somebody may buy them and hand them over to fishermen for operation on the sea. The share arrangement is *abunu* share in kind of the fish-catches between the canoe-owner and the fishermen-operators. Quite recently, fishing canoes have been replaced by engine-powered fishing boats and the ownership share arrangement has been adopted by the owners of these engine boats.

Lastly, apart from crops and machines, a special type of sharecrop ownership arrangement is practised in the case of livestock and poultry keeping in all parts of the country. A livestock owner may give a stock of his breed to a share-keeper under sharecrop arrangement. The arrangement varies according to the type of animal. With cattle, the first calf of a cow goes to the cattle owner and the share-keeper takes the second-born calf, and so on. Most herdsmen in Ghana are immigrant "Fulanis". The arrangement involves the milk produced, a share of the calves and/or various commissions. Naturally, sheep, goats and pigs give birth to young ones in varying quantities; hence the sharecrop arrangement is complex. The sheep owner claims all lambs of the first issue irrespective of the number and still he has an interest in the second lambing if it contains more than one; in the third lambing the sheep owner is entitled to only one lamb, that is, if they are twins the share-keeper is entitled to one. The process starts all over again after the third lambing.

This same sharecrop arrangement is also for goat rearing. With pigs the arrangement is straight forward. The *abunu* sharecrop arrangement prevails any time the sow litters evenly, otherwise the odds sucklings are added onto the share of the pig owner. The sharecrop arrangement which is always in kind of the sucklings and not in cash is popular among pig farmers in Poakoasi and Nunguaa districts. The system was adopted by the Ministry of Agriculture in its extension programme in the district in 1950. With the help and advice

from the Ministry, a pig farmer was to put up an ideal type of a pig sty on his farm. The Ministry supplied him with a pregnant exotic breed sow. The farmer received practital instruction on daily management for some time, until the sow gave birth. The piglets were divided, according to the prevailing local sharecrop system between the farmer and the Ministry. As the extension services were aimed at encouraging farmers towards pig breeding it was also a means of acquiring farm property.

Poultry keeping is another area where sharecrop ownership has long tradition in Ghana. The sharecrop arrangement is the same as with the pig farmers. In all the cases cited above there is no fast rule about any of the existing sharecrop arrangements. They may vary from one locality to another, and from one person to another. The popularity of the sharecrop system in the area, the type of operation, the need for sharecroppers and the attitudes of the parties concerned are important factors that determine the terms of sharecrop arrangement which may long remain in force or change over time.

4.4 Management of Holdings

The management of holdings is regarded as a dependent variable of land ownership. We have already explained that by means of a sharecrop arrangement a tenant is able to procure land of his own. Again, as a result of inefficient management, some farmers may be evicted from their holdings. It is therefore necessary to look into the farm management problems and to assess the impact of such problems on land ownership.

There are two main streams of labour employment on holdings. These are the family and migrant labour. A larger share of the total labour force is, of course, the family type and where the size of the family is fairly large, the size of the family holding is also large but it does not mean that all the family members will always be engaged permanently on the holding. Some of the members can obtain casual employment outside the family unit without any serious set-back in output though the remaining members will have to work little harder.[50] Gulmer[51] observed such a situation in his studies in East Africa where the Ngoni people managed to maintain food output through the efforts of women and co-operative work groups while male migrants were away.

Both the family and migrant labour are nearly always unskilled and since the

family holding does not require any specialised skilled labour, migrants in particular, continue to pour in for employment every season. Apart from the seasonal employment there is always work on the family holding where migrants can opt to take on annual or causal employment of unskilled type. Once the family holding has become disintegrated (as explained earlier on in this chapter) between man and wife the employment of the entire labour force also becomes divided between these holders. The main cash crop, cocoa and some important food crops have been able to absorb the inflow of labour from outside Southern Ghana to supplement the family labour during operations on farms. We shall now examine the main source of Migrant labour on farms.

The whole of West Africa forms a unique labour market in which its rural savannah districts are the major areas of population movements on a short term, repetitive or cyclical basis, adjusted to the annual agricultural cycle.[52] Northern Ghana forms part of this rural savannah zone of West Africa and the movement of labour from this area must be considered as part of the entire movement of people from the savannah zone to the forest belt. Many economic historians regard land shortage as one of the main reasons for rural labour mobility. In fact, land shortage has been a recurrent theme in much post-war literature on labour mobility.[53] For example, Grove[54] relates a shortage of grain to the occurence of seasonal labour mobility among Hausa in Katsina. Gulliver's[55] studies in Tanzania, too, suggest that, "the tribes and areas which regularly supply large numbers of migrant workers are those whose current resources are poor - almost too poor in fact to satisfy even the low standard of living of their peoples". According to Skinner[56] the annual exodus of Mossi from Upper Volta results from rural poverty. Pauvert[57] also states that it is basically the inability of the land to support the population which stimulated the large movement of Kabre from Togo to Ghana. In all such literatures attention is given to areas where migrants move. In Southern Ghana, it is the fertility of the soil and the increased economic activity which tend to attract the migrant labour from the north. The Northern Region, however, has abundant supply of land but fertility is very poor and until recent years economic activity was almost non-existent. We shall use the migrant labour from the north and the rural economy of Southern Ghana as alternative strategies of the farmers' response to labour services on cocoa and food farms.[58]

The pre-war condition of the country's agriculture was that, because population was sparse, labour was relatively a scarce factor though land on the

other hand, as also a resource factor was relatively abundant. Under such conditions what was expected to take place in the agricultural development of the post-war period when the population had increased, was a clear "structural change, a shift of land and labour resources from subsistence to market-oriented production". Incidentally, the change from subsistence (food farming) to market-oriented production moved along the line of only one cash crop - cocoa. The reason for the farmers' specialisation in production of only one crop could be judged from two main angles. Firstly, the soil fertility and climatic conditions were favourable for growing the crop and the government's post-war policy was to encourage the farmers to step-up production. Secondly, it was due to the farmers' own good foresight for deciding between whether to concentrate on a type of agricultural production which demanded capital intensive equipment requiring semi-skilled workers or a type which could easily lend itself to the use of simple tools and needed unskilled labour-intensive methods. Considering both the cost of equipment and training of workers involved in the former, the farmers were inclined to choose the latter line of production so as to economise on the use of unskilled, labour-intensive methods. It was upon such a criterion that the use of migrant labour from the North, in particular, became intensified on cocoa farms. Hence, the areas in Southern Ghana where this cash crop thrived best tended to be the major migrant labour absorbing centres.

We have mentioned that migrant labour in Ghana formed part of the entire labour pool in West Africa. It means that since Ghana and Ivory Coast, for instance, had in the past been alternative destinations for migrants from the Volta Republic, changes in wages or job opportunities in Ghana would influence the flow of Voltaics to the Ivory Coast. And in fact, price of cocoa during the post-war II period was not stable. Even during some years when the world market price was high a Ghanaian farmer was not paid his proportionate share of the income derived from his produce so he could also give a reasonable reward for the labour employed on his farm. The frequent price fluctuations of cocoa as well as the changing general farm conditions also affected the size and direction of migrant labour. Because sometimes the wages paid to workers on cocoa farms were comparatively lower than in other sectors, say the mines, there was a drift of migrant workers from cocoa farms. Even within the Agricultural sector the labour drift found its course from cocoa operations to food crop activities. Table 6 gives a vivid impression about the migrant labour mobility.

Table 6

Estimate of Numbers and Percentages of Migrants in the main occupations in the Gold Coast (Ghana) 1954.

Occupations	Total Ashanti & Colony	Total Migrants from the North	Total Migrants from French West Africa
Male Wage-earners (excluding Agriculture)	524,000	300,000 (60)	200,000 (40)
Agriculture - Male (excluding cocoa)	300,000	180,000 (60)	120,000 (40)
Traders - Male & Female	400,000	110,000 (27)	65,000 (16)
Total Population (Male & Female)	3,312,000	600,000 (18)	385,000 (12)

Source: Jean Rouch, - Notes on Migration into the Gold Coast - (First Report of the Mission carried out in the Gold Coast, Paris - 1954). As quoted in the United Nations Economic Bulletin for Africa - Vol. VI, No. 2 - July, 1966 - p 95.

The above figures do not include the migrants engaged in cocoa farming. Perhaps, it was obvious that most of the migrants engaged in Agriculture were employed in cocoa activities and it was rather more important to find out those not connected with cocoa farming. Most of the migrant workers were young and unmarried and even if married left behind their wives and children to carry out the rest of the operations on the holding in the home area. Cocoa cultivation being seasonal, it was only those who had no declared intentions of a permanent stay that would remain in that sector. They would be employed on a seasonal or temporary basis. The young migrants would be unwilling to take on permanent jobs which could compel them to settle since they were anxious to return home to get married. The aged migrants were already committed to their family ties before they decided to migrate; their main intentions were to earn enough money within the shortest possible time and to return home to carry out the major operations on their holding. Perhaps it was on the basis of this type of migrants' "movement which lacked any declared intentions of a permanent or long standing change of residence" that Zelinsky[59] stated that "those involved should be described as circula-

tion rather than migration. Other writers agree with him in his view of the "dominance of the climatic seasons in regulating the periodicity of movement".[60] Owing to the periodicity of movement employment of migrant labour fitted in well only with production of cocoa and some specific food crops because of the tolerance that this sector has for traditional methods of cultivation. By its own character of seasonal movements, migrant labour could not be used effectively on any large-scale modern agricultural holding where there was a need for sustained skilled labour services employing the use of machinery for farm operations. Because migrant labour was always seasonal, it could not be used effectively in other agricultural sectors where labour could be trained to acquire skills which would lead to permanent employment for modern methods of farming. We assume that the seasonality of the flow of migrant labour also contributed to the set-back in the process of agricultural transformation from traditional to scientific approach.

The temporary nature of the agricultural labour force must have been caused partly by the geographical position of the country. Apart from Ivory Coast, Ghana shares other boundaries with comparatively very poor agricultural countries. For example, Upper Volta has a relatively poor and infertile 105,900 sq. miles of territory bounded on the south by Ghana and some authorities believe that about 50,000 Mosi tribal workers migrate annually to Ghana.[61] In the history of the flow of seasonal workers Ghana was fortunate with her climatic condition in the South for growing both annual and tree crops all the year round. The two seasonal requirement for farm labour made it possible for any migrant from outside the country or even those from the northern parts to get jobs on the farms. A migrant was to decide which time of the year he wanted to travel to or from Southern Ghana. In practice, however, migrants left their home areas at the time when there was less work to be done on their own farms usually, they stayed for only a few seasons and then returned home. It was this temporary type of migrant who boosted the traditional economy most. Owing to regional variations as well as the seasonality of agricultural production the temporary migration of the kind available to Ghana was more efficient than permanent migration.[62] The two types of migration were historically caused by the new era of socio-economic conditions that prevailed throughout West Africa. The traditional type of migration caused by tribal warfare or the type stimulated by european merchants in West Africa took another turn. After the Second World War the economic situation was such that people were determined to regain their economic losses of the war period. All tribal warfare and unnecessary har-

assment of strangers came to an end. Instead, people became more friendly with their neighbours, especially aliens, and counted more on the help and co-operation they could get from them. Ghana in particular became a host country to many migrants because of the increased economic activities. At the time when the farmers were clamouring for new lands to resume the cultivation of cocoa, migrants from the north and elsewhere, especially those from the neighbouring French-speaking territories were compelled to leave their homes for Ghana as a result of the French government's post-war policy of tax imposition on the inhabitants of her territories.[63] The energetic cocoa farmers in Ghana, who desired to open up new farms took advantage of the influx of the migrants. Those from the French territories willingly took up employment because they were paid in coins that they could exchange for French currency.[64] There was no restriction of transfer of money from Ghana and since there was always farm work available, the attraction of migrant workers to Ghana was higher than to her sister English-speaking former colonies.

In our consideration of the type of work which was available to the migrant workers, it is necessary to ignore the existing political regional boundaries of Ghana and divide the country into two main climatic or vegetational zones.[65] Accordingly, we have two main regions - the North and the South. The boundary lines between these two regions are drawn along the Black and White rivers of Volta. From the agricultural point of view, the two regions stand quite apart from each other in terms of crops grown and seasons of farming. The North has a single short rainy season and a long period of dry weather of about six months or so in a year. These conditions naturally render the entire region a grassland area with a very poor soil fertility. Consequently, farming of grains, pulses and livestock are mainly on subsistence level. Unlike the Southern Region, there are no exportable tree cash crops. There is only one crop season in a year during which all farm operations take place. Thus the system of farm practice is such that most crops have to be harvested within a very short period of time; after which the seasonal labour is free to move to the south.

The Southern Region is a predominantly forest zone with major and minor rainy periods which make the region a two-crop-season area. There are also special crops that can be grown all the year round in addition to a large number of tree or plantation crops. For our purpose, the most important of them all in the South is cocoa which "in 1954 accounted for 25 per cent of

gross national product and 75 per cent of Ghana's exports".[66] There are again, many staple food crops grown either mixed with the tree crops or as pure stands on separate food farms. Most of the staples grown in the southern region cannot be grown in the northern region; similarly the northern staples do not thrive in the southern region.

The extent of different edaphic factors between the two regions reflect on the degree of regional specialisation of agricultural production though the trade between the two regions is considerably limited. The trade is mainly in exchange of cattle from the North for kola in the South. The limitation in the trade is largely due to high cost of transportation, low income earnings of the nothern natives and perhaps differences in taste of the farm produce, probably due to different methods of storage. For example, in the Northern Regions, actual subsistence farming is unknown.[67] The farmers grow their grains, and various kinds of vegetables and harvest all these to be kept for consumption during the long off season. They are able to get food to feed on throughout the off season period because of different ways of storage which the farmers in the South do not know. For instance, "if a farmer in the Northern Region grows orko, the wife must know how to collect the green leaves and dry and keep them for making soup. She can also harvest the green okros, cut them into pieces, dry them and keep them. She has to know all these things because all that she is harvesting in September and October are what the family is going to feed on until same time, next year".[68] All these are qualifications which help to give a clear impression about the different nature of the two regions as well as their separate rural community life.

The regional specialisation of the agricultural production of the North and South as we explained did not mean a complete independence of the economy in each region. In fact the farm output of the South depended largely on the inflow of labour from the North. It was also from the export earnings of the cash crops in the South that ensured the economic development in the North. Because trade between the two regions was non-existent or quite negligible the main economic relationship was seen more in the supply of and the demand for labour.

The inflow of labour from the North was of two types. The first was the permanent type; the people who moved to the South with no or little intention of returning home and who would decide to stay on permanently. The second,

was the seasonal type of migrants from the North to work in the South only for a season or so. After a short period of stay when they had earned enough money, they returned home. It is this latter type of migrant we are more interested in in our current discussion. Berg's studies[69] in 1959 revealed a very high proportion of seasonal migrants in the North-South movement. Of the 102 Voltaic migrants questioned on their return from Ghana employment, exactly half claimed to have been in Ghana for employment, 84 said they planned to stay six months or less, and the rest under one year. The inter-regional flow of labour between the two regions started slowly before the late 1930's but developed remarkably in the first decade of the post war II period. "During 1937-40, for example, an average of 35,000 labourers migrated from the North to the South each year and in 1945 the number of seasonal labour migrants appeared to be about 46,000. The seasonal migration doubled between 1945 and 1948 and increased five-fold to more than 200,000 by 1954. After 1954 the volume of migration grew more slowly [...]"[70] There seemed to be no economic reason for the slow movement of the seasonal migration since the mid-fifties was a period of high economic activity in Ghana. However, there could be some political reasons which theatened seasonal movement of migrants. In the mid-fifties most of the West African countries were agitating for political independence and it was likely that some political hostilities checked the inflow of migrants. In Ghana itself, the struggle for power between the two main political parties - the Convention Peoples Party (C.P.P.) and the National Liberation Movement (N.L.M.) in the early fifties could easily check the inflow of migrants to the South. Evidently, there was occasional bloodshed of some party members of both political parties, particularly in Ashanti, Brong Ahafo and Eastern regions. The fact that these three regions are the main cocoa producing centres and therefore happened to be the chief employment centres for migrants, any political disturbances such as those which were occurring during the fifties were likely to curtail the inflow of migrant labour, at least, temporarily.

The prevailing economic conditions in the South regarding wages, opportunities for employment, nature of employment, accomodation, friendly or hostile attitudes of the natives in the employment centres towards the migrants could determine the duration of stay. In areas where such conditions were favourable a migrant was likely to stay longer than he had previously planned. Similarly, unfavourable conditions might compel a migrant to curtail the length of his stay. On the other hand, whatever the economic conditions were some of the migrants could not afford to stay longer than they had previously

planned because of family ties and other farming obligations at home. These seasonal type of migrants were inclined to make several trips to and from the South in a few years. They left the North during the slack season and came to work in the South during the peak season and vice versa. Such a reciprocal inflow of labour from the North to the South was regulated by the main annual rainfall in the South. From about the mid-second quarter to the end of the third quarter of the year is a period of wet weather. The inflow of migrants from the North slowed down; the first and third quarters are dry periods conducive to travelling hence it was the time the migrants arrived from the North. The seasonal movement of labour from the North to the South fitted well in the farm calender of both regions. The period of inactivity in the North corresponded to the time of peak agricultural labour demands in the cocoa growing areas in the South. Owing to the seasonal variations in the two regions it is important to deal with only a few selected crops grown in each of the regions. The calendar year during which all farm operations take place is divided into four quarters. The peak and slack periods in each of the regions for the selected crops are shown in "Quarterly Labour Requirement for Food, Cocoa, etc."[70] Apparently, demand for labour is highest during the peak periods of farm operations. There are peak and slack periods of the farm activities of the crops as well as high and low labour demands on farms in both regions.

The six crops of the farmers' main interest in each of the regions have been selected to fit into the seasonal activities. Four of the crops represent the main staples and two relate to cocoa production. In the Northern Region, millet and guinea corn are treated as one crop. The demand for labour by millet-guinea corn farmers reaches a peak during the second quarter and also becomes fairly high in the third quarter. The labour requirement for planting operations begins with rainy seasons in late March. The dry period which starts about September marks the beginning of the slack season on farms. It is here assumed that land for growing millet and guinea corn is separate from land for growing yams. In other words, millet-guinea corn is not an important crop in the yam growing districts.

Yams are grown on large-scale basis in the savannah areas in the North. The yams are classified according to their planting time. Those planted during January-March are harvested in the following year and are called, "early" yams. Those planted during September-December are also harvested a year later. They are called "late" yams. In practice, the peak and slack periods

in the savannah areas of the North depends upon the time of the rains favouring either "early" or "late" yams.

In the forest belt of the South, the main staples are plantain and cocoyam. They are often inter-planted with young cocoa seedlings to serve as a temporary shade to the cocoa. Plantain and cocoyam are regarded as a single crop (food). The demand for labour on the food farms reaches a peak in the second quarter. The last quarter of the year is the slack period. The land required for food growing is cleared land, supply of which is here assumed to be constant.

With the production of cocoa, the seasonal labour requirement for new cocoa planting is different from that of bearing cocoa trees. We must bear in mind that it takes about seven years for newly planted cocoa to come into full bearing. To establish a new cocoa farm, one needs a large amount of labour; first, for clearing the land and felling of the trees and second, for weeding and planting. It may take about six months (January-July) to get through all these operations. The heaviest labour requirement comes on in May, June and July. Weeding, replacement of destroyed seedlings, reducing of shade trees and spraying of insecticides against pest/diseases come on in a slow tempo throughout the seven-year gestation period.

The busy period on bearing cocoa farm is the harvest of the main crop season beginning in September to January. There is a peak period of demand for labour in the last quarter of the year. The output of cocoa is basically determined by the existing acreage of bearing cocoa trees and the labour employed, hence such a high labour requirement. On food farms some of the operations can be delayed if sufficient labour is not forthcoming; but on bearing cocoa farms all harvesting operations must be done within a very short period of time therefore the seasonal demand for labour is compressed into a very short interval otherwise the yield of the crop will drop as a result of damage - rodents' destruction of pods, over-ripening followed by seed germination in pods, etc. It means that even in cocoa growing areas where the population density is high to supplement the migrant labour there is a likelihood of a shortage of labour.

We have already explained that not all migrants return home soon after the crop season. Perhaps for reasons of insufficient earnings or savings those

who stay on may decide to accept off-season jobs to supplement their earnings or savings while waiting for the next crop season. These "stay-on" seasonal migrants are employed as casual labourers usually outside cocoa operations though a few are soon employed to help brush the undergrowth of cocoa farms.

A family unit holder in the Southern forest zone of Ghana has a dual farming responsibility. The first is the responsibility of management of his "cash" crop farm. The "cash" crop is defined as the main perennial or tree crop for which purpose the land was formally acquired and initially cleared for cultivation. The examples of "cash" crops are cocoa, coffee, oil palm, etc. The second important responsibility is his development and maintenance of "catch" crops. A "catch" crop is a seasonal crop in the sense that its growing cycle begins and ends within one season so that the farmer is able to harvest for sale in a local market and to live on the sales income while awaiting for the impending cocoa harvest season. The examples of "catch" crops are maize, groundnuts, cassava and vegetables like tomatoes, etc. Table 7 gives an impression of some essential "catch" crops which were under cultivation during 1966-68 period in Southern Ghana.

The employment of labour on family unit holdings may be classified as follows:

(i) Permanent Labour

It is misleading to describe a certain type of agricultural labour other than the family always working on their farms as "permanent". And even, with the family, the word "permanent" is still misleading since many of them are employed as sharecroppers, casual or on contract basis. For our purpose in this chapter it is more convenient to describe the type of labour found in government and quasi-government large-scale organisations[71] in Ghana as permanent labour. The workers in these large concerns receive a minimum wage and their rights are protected by their trade unions. They have the same service conditions just as their counter-parts in the civil service and other State Corporations. Since the nature of work and conditions of services are governed by the government interim regulations, etc. they are not considered in our present discussions.

By definition another type of permanent labour is found on holders' farms. During the 1970 Agricultural Census, a permanent labourer was

Table 7

Crop Area by Regions - 1966-68

Crop	Year	Western acres '000	%	Central acres '000	%	Eastern acres '000	%	Volta acres '000	%	Ashanti acres '000	%	B/Ahafo acres '000	%	Chana acres '000	%
1. Maize	1966	46	5.9	126	16.1	122	15.5	71	9.0	66	8.4	123	15.7		
	1967	45	6.2	101	13.9	136	18.7	84	11.5	78	10.7	83	11.4		
	1968	42	6.3	97	14.4	116	17.3	71	10.6	55	8.2	98	14.6		
2.*Cassava/ G'nuts	1966	70	15.2	87	19.0	122	26.6	85	18.5	38	8.3	52	11.3		
	1967	67	14.9	81	20.2	122	27.0	75	16.6	46	10.2	45	10.0		
	1968	61	14.4	72	16.9	102	24.0	81	19.1	40	9.4	66	15.5		
3. Tomato	1966	1	6.7	4	26.7	5	33.3	-	-	5	33.3	-	-		
	1967	1	4.8	7	33.3	10	47.6	-	-	2	9.5	1	4.8		
Strictly refer to Plantain and Cocoyams															
	1968	1	5.0	2	10.0	7	35.0	-	-	6	30.0	4	20.0		

Source: Report on Current Agric. Statistics - 1968.
Published by Economics Division - Ministry of Agriculture - Accra, Oct. 1968 - p 36.

*In most of the districts cassava and groundnuts occupy the same area, since the former is interplanted with the latter on sides of the mounds.

defined as, "a labourer who worked for, at least, six months of the year; and a temporary labourer was the one who worked for a period of between one and six months.[72] According to the census report, 97,200 representing 12 per cent of the holders in Ghana claimed to have employed permanent labourers in 1970. Although the report stated further that the figure must have included another type of farm labour, such as 'caretakers', the information gave an impression of permanent farm labour employment. The districts where this type of labour employment was above the national average were in the major cocoa growing areas.[73]

(ii) Annual Labour

This type of labour is common among the permanent migrant type from the North or outside Ghana. Ghanaian natives rarely work as annual labourers though they work as sharecroppers or on a piece-time contract basis. Annual labour is hired on a contract basis for a period of one year or sometimes for half a year. It is part of the contract that the farmer pays the labourer an agreed annual pay. Again, he is to house and feed the labourer during the whole period. In addition the farmer buys the labourer working clothes, provides working tools like cutlass and hoes, etc. The labourer has a day free from work after every week's work. "The contract agreement between employer and employee by law is to be signed by both the employer and the employee and a copy filed with the Ministry of Labour.[74] In cocoa growing areas annual labourers may earn between ¢ 60.00 and ¢ 70.00 per year, but this may vary in certain regions. See Table 8.

Table 8

Annual payments received by Year-round labourers in Sub-districts in the cocoa belt survey July-August - 1970

Region	Region of Payment reported	Most common Payment reported
Volta	¢ 50.00 - ¢ 60.00	¢ 50.00
Brong Ahafo	70.00 - 90.00	72.00
Ashanti	60.00 - 80.00	70.00
Western	60.00 - 70.00	60.00
Central	70.00 - 90.00	70.00
Eastern	60.00 - 70.00	60.00

Source: Rourke and Sakyi-Gyinae - "Agricultural and Urban Wage Rates in

Ghana". - The economic Bulletin of Ghana - Second Series, 1972 [2(1) 3-13] - P8.

The primary purpose of an annual labourer is that of clearing land for the establishment of cocoa but he must also be prepared to take on any farm work his employer finds necessary and within the labourer's capabilities. For example, planting and harvesting of cocoa require special techniques and unless the employer is convinced that the labourer has that skill the latter will not be entrusted with these operations. Hence, few annual labourers of migrant type harvest cocoa. Annual labour is common in all cocoa growing districts but it is also found in the large-scale yam producing areas. Adomako-Sarfoh's surveys[75] in nine villages in Western Ahafo where by 1968 farmers were still establiching new farms on their remaining forest lands have interesting impressions to give about annual farm labourers. In the nine villages, 107 annual labourers were employed by forty-two farmers. The farmers were mainly Asantes, the rest included some Brongs, Kwahus and Akwapims. Each of the forty-two farmers had at least two annual labourers; four had between them twenty-three working on their cocoa farms. It was found that two of these four had seven annual labourers each and were being financed by rich Kwahu traders resident in Accra. Out of the 107 annual labourers interviewed, forty-seven claimed to come from northern Ghana while the remaining sixty stated that they were non-Ghanaians: forty-two were Mossi from Upper Volta; five came from Ogbomosho in Western Nigeria. The rest were not sure of their nationalities. About 60% of the farmers interviewed stated that they were content with their annual labourers for the very good work they were performing on their farms; but six of the farmers were sorry because within the first three months of their engagement eight of their labourers had run away with their clothing as well as the advance payments they had obtained. It was explained that while a labourer could run away if he disliked his employer so could the employer terminate the appointment of his labourer if he was not satisfied with his work. In such a case, the number of working days would be calculated and the correct amount paid to the labourer if he was not already indebted to the farmer. In all, 75% of the annual labourers had no intention of breaking their contract when asked, because according to them, they were content with their employers. They also preferred being annual labourers since it enabled them to collect their money in bulk at the end of the contract period

while during their service period they were provided with free food and accommodation and even received free medical attention when sick. At the time of the survey the average annual wage for an annual labourer was about $ 52.00. It was usually based on the experience of the employee.

(iii) Sharecrop Labour

This type of agricultural labour has been already discussed and there is no need to re-emphasise it here.

(iv) Casual Labour

This is the most employed labour on farms. Casual labourers are engaged either on piece-work contract basis or on daily basis. If on contract the labourer receives a fixed sum for specific a job of work irrespective of the time he will take to complete the work. It makes no difference in the type of work whether a casual labourer works by the day or by contract. However, experiences is most areas have shown that it is the employer who determines the type of agreement for work. Rourke and Sakyi-Gyinae[76] have an impression that for work that can be fairly clearly specified and measured, the employer is likely to prefer a specific contract to avoid the necessity of constant supervision. If the work requires careful supervision in any case, by the day payments are likely to be made. Polly Hill also claims that, "contract labourers never pluck cocoa; their usual tasks are weeding or clearing land in connection with the establishment of new cocoa farms".[77] The impression that contract labourers never pluck cocoa cannot be generalised. Whether a contract labourer will be required to pluck cocoa depends upon his experience and skill in this operation. While a new migrant contract labourer may not be called upon to pluck cocoa the natives who often take on contract jobs pluck cocoa in view of their experience in cocoa farming and the skill in this operation. In fact, it is in this field of operation that the native young men take on contract work most in cocoa areas. Even by the nature of the operation women are not supposed to pluck cocoa but shortage of labour has compelled them to actively participate in the operation.

It is difficult to assess payment for contract work on the farm because it depends upon the size and type of work. The 1970 census of Agriculture[78] showed that payment for labour solely 'in kind' is un-

common except in the Upper Region. Payment partly in cash and partly in kind is more common, particularly in Brong Ahafo, Northern and Upper Regions. Table 9 gives the impression of the method of payment for farm labour in the various regions.

Table 9

Percentage of Holders Employing Labour by method of payment of labour - Regions

Region	Holders employing labour who paid			Total
	In Cash	In Kind	Both	
Western	77	2	21	100
Central	91	2	7	100
Eastern	82	3	15	100
Volta	86	3	11	100
Ashanti	89	4	7	100
B/Ahafo	70	1	29	100
Northern	73	3	24	100
Upper	35	22	43	100
Total Ghana	80	4	16	100

Source: 1970 Census of Agriculture - op.cit. p 42

Apart from the Upper Region, payment solely in cash is by far the commonest form of payment in all the regions. The Rourke and Sakyi-Gyinae's 1970 survey[79] revealed some 'by day' wage rate differences in the regions. They observed that fringe benefits would grossly underestimate 'actual' wage rates of agricultural workers, and made effort to value these fringe benefits. The differences in the common money wage rates and "Actual" wage rates in all the regions varied from about 55 p to 75 p respectively (on average).

(v) Family Labour

The notion behind the concept of Subsistence Cultivator Family Unit as implied in this study is that in Ghana farming is regarded as a rural enterprise which is undertaken by the 'nuclear' or the 'polygynous' family. Thus the whole arable land of the country comprises hundreds of village communities. Each community has its own work organisation

within which a family unit traditionally decides which tasks on the holding fall to a man and which are assigned to wives and children.

By tradition a young man farms with his father or senior brother but once he marries he and his wife start farming as an independent family unit, though they may occasionally (peak periods) assist their parent-family in certain specific operations. Even so, a man and his wife might occasionally share the same tasks, each operation would be performed by one or the other. It is in rare cases that a man does a woman's work or vice versa. Such a farm organisation is merely by tradition which seeks to assign light operations to women and more tedious ones to men. Hence in most communities men's fixed responsibilities are clearing of the heavy bush and tree felling etc. The women do the planting of all crops, harvest and convey them to barns or the house, do the post-harvest processing and marketing later. It is obvious, then that women have more responsibilities on family's farming enterprise than men and hence the former spend more time on farming activities than the latter.

Just as the farming responsibilities are traditionally divided between the man and the wife so also is the financial burden of the family unit. The man bears all the major financial responsibilities of the wife and children. The expenditure of the daily food for the maintenance of the family as well as the clothing of the wife and children are all the man's responsibility. Against this background is also the fact that none of the members of the family receives remuneration for any of the work performed on the family holdings. The total farm income is partially divided according to who owns what part of the farm plots. The man has the major family farms, especially the cash crops to himself and the income derived from the proceeds thereon is for him. The woman owns the cassava, maize, cocoyam and some vegetable plots. She alone is entitled to the income earned from the sales of the crop-yields.

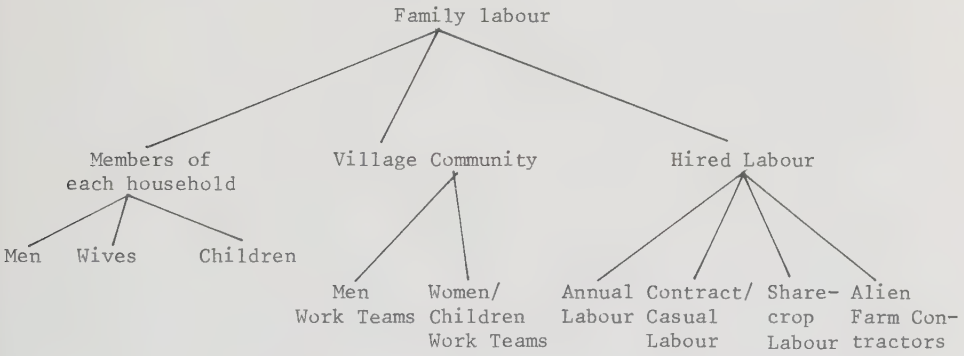
Although the size of a family unit is large, it is unable to carry out all farm operations alone and in absence of hired labour relatives or friends are occasionally called upon to assist in certain operations. Accordingly, an entire village community comprising of several family units becomes the alternative source of labour. Because all the mem-

bers of the community belong to the same clan and therefore are related to the ancestral owners of the land they are easily prompted, in times of need, to organise themselves into work teams to assist in operations in the holdings of each family unit on a reciprocal basis.

The team moves from one man's farm to another's; the men in each team performing the most tedious operations such as clearing, tree felling, etc. while the women and their children when required are assigned to some light operations which need to be completed as early as possible such as harvesting or processing and conveyance of farm produce for the market. Fig. 2 shows the classification of family unit labour.

Fig. 2

Classification of Family Unit Labour



The two surveys[80] which were carried out by different groups in 1970 showed that hired labour was used on farms though one of the groups reported that in Upper Region little hired labour was used. Rourke and Sakyi-Gyinae[81] stated that even where hired labour was reported, the estimate of the local agricultural officers gave a small percentage of farmers who hired labour; the researchers assumed that it was due to the relative poor cash income earnings which limit the ability of farmers in Upper Region to hire labour. In another survey in the north-eastern part of Upper Region, Uchendu and Anthony reported that farmers worked in groups on farms in an unpaid communal basis.[82] Communal labour forms a greater part of work organisation on farms in Upper Region and there is a tendency for this type of labour to be used, wherever

possible, instead of hired labour. The reason for the low employment of hired labour on farms in that region may due to the additional use of unpaid communal labour and not because of poor cash income earnings of the local farmers.

(v) Alien Farm 'Contractors'

The increased shortage of farm labour since 1970 has resulted in the appearance of a new type of farm labour known as the "Alien Farm Contractors" in the cocoa farming areas. Accordingly, some aliens who self-style themselves as 'contractors' undertake to establish a cocoa farm and maintain it for two years before handing it over to the owner for a fixed sum of money. The agreed charge is usually based on acreage or the 'rope'.[83] Payment is usually spread in three equal instalments, the last of these made just as the farm is handed over to the owner. In his recent survey in Western Ahafo, Adomako-Sarfoh[84] interviewed four western Nigerians all working for actual farm owners not resident in the area. Two of these real farm owners were said to be businessmen in Kumasi; the third was said to be an Ashanti chief while the last was a college tutor. Some of the farmers questioned during the survey, though did not deny the presence of the 'contractors' in the area and elsewhere in the region, they mistrusted them, since as the farmers explained, the 'contractors' would collect the bulk of the contract money and run away without completing the work. The ethical aspect of the operation of these 'contractors' must be ignored. What is of our main interest here is that shortage of farm labour is giving rise to the services of a new class of cocoa land owners quite different in character from sharecroppers.

(vii) Other types of Farm Labour

It is not easy to classify all types of labour employed on the farm without falling into a trap of overlapping in the classification. For instance, some writers have regarded contract labour, *Abusa* or *nkotokuano* systems as a separate type of farm employment from other types of farm labour. A farmer may employ a causal labourer to work on a contract basis. The labourer receives a fixed payment of money on completion of a piece-work irrespective of the time involved in doing the work. He is a causal labourer because on completion of the piece-work he is paid-off; he is also a contract labourer on the basis of the terms of his employment as described above. Again, the same

contract or causal labourers can be employed elsewhere from their own farms on casual or contract jobs as *abusa* or *Nkotokoanomen* in order to earn extra income usually during off-seasons or otherwise during the peak season periods when they have completed their own farm work. In practice it is not easy to distinguish between casual or contract labourers as being permanent and entirely different from *abusa* or *nkotokuanomen* on any quantitative basis. As one operation on a farm may be performed by different types of labour it may be reasonable to try to identify the hours-input of the different types of labour in the same operation. For example, an *abusa* or *nkotokoanoman* may himself take part in plucking cocoa and at the same time employ the services of causal or contract labourers.

Another important type of farm labour employed on cocoa farms is *nnoboa* or communal labour. The whole village community become involved in almost all the operations on the farms belonging to each of the heads of the family household. This type of farm organisation seeks to reduce operation costs and ensures good relationships among farmers, particularly when it comes to exchange of ideas. In times of farm labour shortages communal labour is the best solution to the problem.

The family and the Seasonal Migrant labour form the main source of regular employment on food farms. For the purpose of our discussion, the Family labour is classified into two, though the two groups may sometimes shoulder the same responsibilities on the holding. The man's role as the head of the family, the landowner or the sole manager of the cash crops is distinguished from the role of his wife and children whose regular active participations are concentrated more in the household and on food farms. The Seasonal Migrants too, are here classified into two main groups. There are 'Perfect' Seasonal Migrants who always return home at the end of every season. There are also the second group who decide to take on off-season jobs while waiting for the next planting season. We may call them 'Stay-on' Seasonal Migrants. The inability to buy the needs or pay for transport costs to return home due to insufficient earnings has given rise to this group of 'Stay-on' Migrants. Several of them virtually become permanent migrants or even settlers.

Table 10

Common Types of Communal Operations on Cocoa Farms

Type of Operation	Participation
1. Initial Clearing	By Men
2. Tree Felling*	" Men
3. Farm Cleaning**	" Men
4. Trans-planting Seedlings	" Men and Women - Children may assist
5. Brushing under growth	" Men - Women may assist
6. Spraying***	" Men
7. Pruning	" Men - rarely on communal basis
8. Plucking Pods	" Men - sometimes women
9. Pod gathering	" Women and Children
10. Pod breaking	" Men, Women & Children
11. Carting fermented beans	" Men, Women & Children
12. Drying beans	" Men, Women, Children may assist
13. Head-loading & carting to buying stations	" Men, Women and Children or by contract labour

* This operation was replaced by ring-barking and the application of a triazone, a woody-cide in the 1960s. Since 1970 there has been an introduction of tree felling machines.

** This operation may take place before tree felling.

*** A new development since 1950's when insecticides were introduced. The operation required more men when hand-brushes were used to paint the chemicals on the branches of the cocoa trees; later when spraying machines were introduced the operation no longer required the assistance of more men.

We have already stated earlier on that there is always work on the farm in the forest zone of Southern Ghana and that at any time of the year, a migrant is likely to get employment even during cocoa off-seasons. Food farming is the alternative source of farm employment. The nature of food farming is of a traditional type, just as it is in other farm undertakings. It means that food cropping is predominantly operated, in all districts on a small holder peasant cultivator family basis. A system of shifting cultivation and bush fallow form the important characteristics of peasant agriculture. Hence, within the system, a farmer may cultivate his land without the assistance of animal power or machinery but by using simple tools like hoes, cutlasses, axes and sharpened digging sticks for planting. He is usually assisted by his family but occasionally employs hired labour for specific work. The size of a peasant's farm depends largely on the size and working ability of his family as well as upon his financial capabilities of employing hired labour.

In Ghana, the principal food crops in the forest zone are plantain, cocoyam, maize, groundnuts and yams. These crops have been cultivated for a long time and are therefore traditionally regarded as most important and most culturally valued. Imagine the annual celebrations of a yam festival which signifies the day the Chief in the area tastes fresh yam food for the first time to mark the beginning of the new harvest season. Before the celebration all members of the rural community are forbidden to taste new yam food. But in spite of this high cultural value of yam, cassava, which during the last thirty years or so was not regarded as important in the Ghanaian diet and so its cultivation was neglected has now over-taken yam production in most areas. The shift in the production is not necessarily caused by a change of taste for yam tastes better than cassava, but rather by the economic advantage of cassava over yams. The former has the ability to grow on less fertile soil and the rapid increase in the country's population over the last thirty years has affected the fertility of farm lands owing to poor cultivation.

Again, cassava is a crop which has ease of cultivation, is hardy to withstand bad weather conditions, its cultivation involves less use of labour and it has also the convenience of long storage. When it is matured it can be left in the ground for some time and harvested when needed without deteriorating in value. Owing to the increase in Urban population, cassava products have come to be highly demanded on Urban markets for both human and industrial consumption. Hence, cassava, some other food crops and vegetables continue to form the major staple crops whose production cannot be neglected.

In view of the multiplicity of staple crops there is also a clearly defined farm calendar for the production of these crops just as there is for the production of cocoa. The Schedule of operations of food farm is as per Table 11.

Table 11

FARM CALENDAR

Month	Farm Operations
(1) JANUARY	(a) Planting of yams continued (b) Training of yam vines and staking (c) Weeding and nipping buds of dry-season Vegetables (d) Processing of crops (e) Land clearing and burning followed by cleaning
(2) FEBRUARY	(a) Land clearing for groundnuts/cassava, dry season maize (b) Training of yam vines continued, Weeding of yam plots. (c) Maintenance of dry-season vegetable plots
(3) MARCH	(a) Site selection and clearing of plots for ground/nut/cassava 1st season maize (b) Harvesting dry season vegetables & maize
(4) APRIL	(a) Sowing groundnuts/cassava, 1st season maize (b) Major weeding of yam plots (c) Harvesting of vegetables
(5) MAY	(a) Major harvesting of vegetables (b) Weeding groundnut/cassava plots (c) Planting plantain suckers
(6) JUNE	(a) Brushing pure stand cassava farms (b) Site selection for 2nd season maize (c) Weeding of yam plots continued
(7) JULY	(a) Pricking of yams (b) Clearing for 2nd season maize, groundnuts/cassava (c) Harvesting groundnuts
(8) AUGUST	(a) Planting 2nd season groundnuts/cassava (b) Clearing for 2nd season maize (c) Transplanting plantain suckers and cocoyams
(9) SEPTEMBER	(a) General maintenance of all food farms (b) Planting 2nd season maize
(10) OCTOBER	(a) Site selection for dry season planting (b) Maintenance of food farms
(11) NOVEMBER	(a) Land clearing for dry season maize & vegetables (b) Burning and cleaning for yams (c) Erection of yam barns (d) Preparing yam mounds
(12) DECEMBER	(a) Transplanting of dry season vegetables (b) Mounding for yams continued (c) Sowing dry season maize (d) Harvesting of yams (e) Processing of crops and other barn activities

Fig. 3

Estimated Percentage of Participation of three Major Types of Agricultural Labour on Food Farms

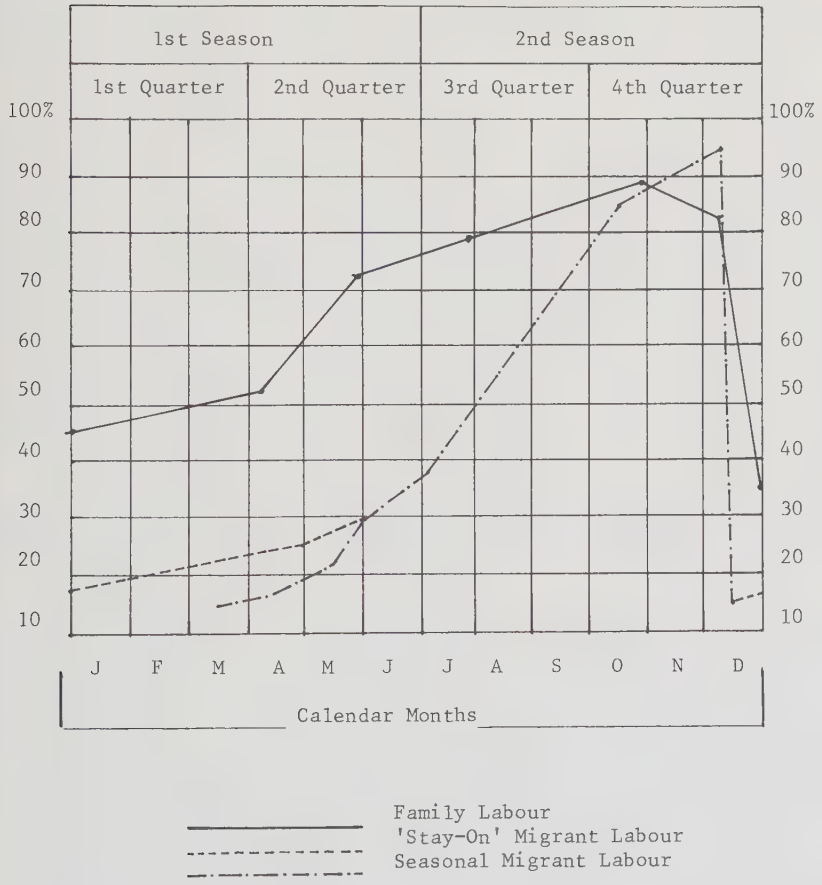


Fig. 3 shows the type of labour and the estimated degree of seasonal participation in food farm operations. The preparation of the minor planting season begins with clearing and burning of the bush between January and March; the second-half of the dry season period. It is the best time for clearing farms for the first season crops. By this time it has not rained for a sufficiently long period so that the grass and shrubs are dry and can be uprooted and burned easily. The burning operation depends upon the vegetation. Where the bush is not thick and consists mostly of grass and shrubs, burning takes place within a week or two after clearing. The exception to this occurs where the land to be cleared is thick and the rainfall is so frequent that a longer period must elapse between clearing and burning before the bush can dry sufficiently for burning. The farms which are cleared in November or December have new under-growth of weeds emerging between the time of burning and the time of planting.

Harvesting of the previous season's crops and preparation of the soil for the new planting season takes place in January and February. The first season's planting begins with the first rains in March and April. The entire family labour assisted by the 'Stay-On' Seasonal Migrant labourers are involved in the planting operations of the food farms. Traditionally, yams are the first crops to be planted but due to its recent declining importance most of the activities are centred on 'catch' crops such as cassava, groundnuts, maize and some vegetables. Of course, some variations exist in some areas since each community has its own ideas about the order in which the crops should be planted. In certain areas in Ashanti, Brong Ahafo and Volta regions yams are still important crop and they are planted first; while in the same regions or elsewhere in other regions, maize, rice, shallots and even tobacco or cotton may be given the first priority in planting. The increasing economic importance of cassava is widespread in all regions and since it is usually interplanted with groundnut or yams there is a tendency for increased participation in the operations of these crops. In addition to land clearing, mounding for cassava, groundnuts or yams are the operations in which most of the 'Stay-On' seasonal migrants participate. It is true, and the farmers in the forest zone are aware that the migrants from the north work better with hoes than with cutlasses or felling axes and therefore, wherever possible fresh migrants are assigned jobs requiring the use of hoes and not otherwise until they become used to other tools.

Sometimes planting habits appear to be a mere cultural traditions. A threat

from the pests such as rodents and bush fowls causing damage to germinating seeds has also compelled farmers in certain areas to employ a digging stick in planting maize or rice instead of using a cutlass. With a digging stick the seeds are placed deeper in the seed-bed and are unlikely to be detected by bush fowls or rodents.

Land clearing followed by preparation of seed bed and planting as well as the subsequent maintenance of the growing crops require the most sustained and difficult activity of the agricultural year. Fig. 3 demonstrates the active participation of both the family and 'Stay-On' seasonal migrants the latter of course, soon become absorbed into the main stream of 'Perfect' seasonal migrants who arrive and resume work by the turn of the second quarter. This is the beginning of the peak period - a clash period of the farm activities in both cocoa and food farms as well as a clash between the two streams of labour force, the family and seasonal migrants. During the peak period most of the first season crops on food farms are harvested while land preparation for the second season's planting takes place. It is a period for major activities on matured cocoa farms. Under such conditions the rigid division of labour on the farm appears to be practically ignored. Accordingly, women and children who constitute a greater part of the family labour may decide to work partly on food farms and partly on the matured cocoa farms at alternating times of the week. The seasonal migrants whose main purpose is to work on matured cocoa farms may also decide to render their services partly or occasionally on food farms as a means of earning extra income, though such a decision depends upon how much income and extra incentives they can count on from either side of employment.

In practice, women's participation in the food farms tends to be higher in fields which require special techniques of operations. For example, after the tedious operation of mounding of yams has been completed by men, it is the women who later train up the yam vines onto stakes and weed the farm before the pricking stage comes on. "Pricking" operation is a preliminary harvest in which the mounds of early maturing yams are opened so that the main portion of the tuber can be cut. The remainder of the tuber is covered again for the auxiliary tubers to develop more fully and be harvested between September and November as seed yams during the next planting season. The first season crops like maize and vegetables are all harvested and marketed by women during the peak period.

Alongside the women's participation on food farms are also the seasonal migrants who are employed mainly on a casual basis to make new clearings of farms for the second season crop. The seasonal migrants' participation in food farm operations is a post-war development as a result of increased scarcity of farm labour. Hitherto, seasonal migrants were employed solely to work on cocoa farms because they were considered to be incompetent to work on food farms in the forest zone.

Hired employment forms an important labour input on food farms. Most labourers have their own farms but they plan to complete their work early during the peak season and manage to hire themselves out for some few days or weeks.

Since 1970 the rate of annual farm workers has declined significantly. It is partly due to the Aliens' Compliance Order and partly due to the fact that farm workers earn comparatively more in wages for piece or contract jobs. In most areas wages are calculated on the basis of piece work, with so much being paid per hundred yam mounds produced or per acre of bush cleared. Such an arrangement is good for both the labourer and the farmer. While the labourer can earn more according to his ability in a short time, the farmer also is relieved of the problem of constant supervision. This is the reason why in certain areas more farm work is done by hired labourers than by the farmers themselves.

According to Fig. 3 the estimated[85] participation of family labour, mainly women but sometimes with children, is about 45% of the total farm labour requirement of the year from January to about the last week in March. After that it rises somewhat, steadily throughout the second quarter. The possible explanation is that from January to March is a period during which the family labour is employed partly on farms and partly on home handicrafts. The men are engaged in various trades like sandal-making, black-smithing, basket- or mat-weaving, making hunting traps or replacing some of their thatch-roofed houses. The women and children may also take on cloth-dyeing, cotton-spinning, pot-making and fishing in dry rivers, ponds or lagoons to get something to supplement the family diet. Usually, the family go to farms very early in the morning to do light operations like training of yam vines, uprooting some obnoxious weeds, or do quick harvesting of crops so as to come home before noon for craft operations.

During the same period the 'Stay-On' seasonal migrants are hired for piecework to do the tedious land clearing in preparation for the first season cropping. Fig. 3 again, shows that the active participation of the 'Stay-On' seasonal migrants begins about mid-December to about the end of May of the following year when they are absorbed completely into the mainstream of seasonal migrants. The 'Perfect' seasonals with entirely new comers begin to arrive from the north about mid-March and take on farm employment. Both the 'Stay-On' and the 'Perfect' seasonal migrants share equal participation until finally, by the first week in June or so it is no longer possible to distinguish between the two. The second cropping season of the year now begins. In the peak period, the seasonal migrants are engaged more on matured cocoa activities than on food farms. The women's active participation on matured cocoa farms, too become less in view of their heavy committments in food production. The children are on holidays from school during the same period and they form an active part of the family labour. The mothers and the children participate in the operations of the matured cocoa farms but only on occasions during the gathering of pods, breaking of them and carting the fermented seeds to the village.

This is the time when the entire extended family of the village community becomes involved in the operations of one family unit. Hence there is a tendency to increased family participation in the matured cocoa farms and a slight decline in that of the food farms. This is obvious because cash earnings from cocoa are the major economic objective of the family unit. The seasonal migrants intensify their working on food farms from about mid-October or so to earn more extra income through long hours of work during their leisure time because they are aware that by mid-December they will be leaving for home for the Christmas. Around the same time the family labour participation falls because of the celebration of Christmas and other festivals. Those migrants who cannot afford to travel to their home areas stay on the farm for employment until the next season.

4.5 Resettlement Units

According to the early history of Ghana, bands of people were compelled to move from their ancestral lands for resettlement in other areas because of wars, famine or other disasters.[86] Because the movement was caused by natural disaster, the people moved willingly and made efforts to provide themselves with the necessary things they needed in the new environment without

expecting assistance from any quarter.

The experience of the post-war II movement and resettlement of people was different. As a result of national policies certain people had to move from their ancestral homes to make room for developments which would not benefit them alone but in the interest of the nation as a whole. Thus in the re-settlement process there emerged new institutional arrangements in which one had to bear the costs and the other to receive the benefits. The former arrangement was to ensure the success of the policies and the latter was to make life of the victims better and more worth living than before.

We have three types of post-war II Resettlement Schemes in mind. They are the Army, the Frafra and the Volta River Resettlements. In view of our bias towards agriculture in this study, our discussions will proceed along that line without dealing with the non-agricultural aspects of the Schemes. Although quantitative data are not available for full evaluation of the Schemes, our discussions will give a vivid impression about the historic attempts that were made to change the traditional methods of farming of the family unit. The problems that were encountered and the failure of all the Schemes were signs of obstacles in the process of agricultural transformation from traditional to modern systems.

Soon after the war, a large number of the service-men returned from the Far-East (Burma) and other places on discharge from the Army. The presence of these ex-soldiers increased the unemployment situation in the country. The government decided to place a large proportion of the men in farming since they had already acquired skills in machine handling and it was the feeling that they could make the best use of their skills to operate the farm machinery and implements as well. There were also large areas of uncultivated land which could be developed as farms to permanently settle the ex-soldiers. The resettlement programme was to be implemented by the Department of Agriculture.

Accordingly, the Department drew up a plan and selected Northern Ghana as a suitable place for the resttlement of the soldiers. The time coincided with the period of the Department's launching of its new programme of farming by the use of animal drawn implements in land preparation in the Region. The idea was that by placing the ex-soldiers on settlement farms they could be trained quicker and more efficiently than the local farmers so that the

settlement areas could serve as training grounds for the civilian farmers in the Region.

To implement the new programme, bullocks were purchased for training under the ex-soldiers settlement scheme in Tamale, and farm implements were imported from the United Kingdom. "The Scheme was that a man bought bullocks and was trained free of charge in their use in agriculture; and the new farmer was then lent implements so that he might be enabled to set up on his farm. If he worked well the implements became his own property at the end of the first year's working."[87] No limits were imposed on the size of land to be cultivated. A size of farm depended upon the ability of a particular settler since all of them were placed along one long base line with reasonable spaces and were asked to farm ahead by using the trained bullocks. Apart from few isolated cases of success of the civilian farmers who were drawn from the various districts of the Region for training at the settlement centres, the entire scheme was a complete failure. In the end no ex-soldier became resettled or acquired the habit of using bullocks on any farm.

Table 12

Distribution of Plough Farmers - 1948

Sub-District	Plough farmers (civilian)	Ex-Soldiers with implements under re-settlement scheme	Total
Zuarungu	39	4	43
Navrongo	82	29	111
Kusasi	88	8	96
S. Mamprusi	5	-	5
Total	214	41	255

Source: Anyane, S. La - "Ghana Agriculture" - O.U.P. - London, 1963 - p 94.

Another resettlement policy of the Government was the Frafra Resettlement Scheme which was itself, part of a gigantic Scheme for large-scale mechanised farming of the Gonja Development Company (GDC) in 1950. The Scheme was a plan of the Government to settle the Frafra families from their home land because of the poor conditions of the soil in their home area. The land is

rocky and makes the top soil thin for growing crops. Apart from vegetable growing in some few small valleys real arable farming is difficult. The plan of the Scheme was to assist this tribe to improve their future living conditions through better farming. They were to be resettled on fertile land in a nearly uninhabited district at Damongo, some 200 miles away from the settlers' home. There was an Agricultural Station, close to the Resettlement Area at Damongo, to make the previous experiences of cultivation, crop and animal diseases or pests which had already been researched into and acquired on the station become easily accessible to the settlers.

The Government's policy was to be implemented jointly by the Department of Agriculture and the Department of Social Welfare and Community Development. The Social Welfare staff were entrusted with the liaison responsibilities of spreading the news, recruiting, evacuation, transportation and resettling of the families in the various resttlement sites. The staff of the Department of Agriculture which were responsible for all the technical farming aspects of the Scheme, allocated to each family a 12-acre farm; 3 acres of which the Department cleared and ploughed before the settlers arrived. A family was allocated 12 acres of farm-land, a living compound built at the base-line of the farm strip. The compounds were provided with facilities for an open kraal for livestock, mainly cattle and a pen for either sheep or poultry. Each of the newly arrived family was to plant 3 acres of the family strip already prepared immediately on arrival so as to ensure itself of sufficient food supplies in few months' time.

The whole resettlement area was planned and grouped into several family communities, each community with a large stretch of land in which the 12-acre family farm strip formed part. The arrangement was to reflect the usual way of living of the Frafra tribe in their home land. In 1956, the first families began to arrive. Since it is not easy for any farming community to be moved from its ancestral homes, the number of the first arrivals of families was small. Some of the heads of the families arrived in debt. Some few years later when those who came first visited home with several bags of surplus grains to sell to their own people and the debtors to settle their accounts, more families offered themselves willingly to follow as settlers.

According to the programme, the settlers were to be taught the improved methods of mixed-farming system by means of bullock ploughing. Upon arrival, a settler and his family were housed in one of the newly built compounds and

shown the boundaries of his farm. All the first season's operations in the farm were carried out by the Department of Agriculture, except the post-harvest processing of the crops and some other minor operations which were sometimes arranged on communal self-help basis. The subsequent operations after the first crop-season were charged at some subsidised rates. It was hoped that after the first and second years of land prepartions with machines, the soils would have become loosened and friable enough for the settlers to be able to use bullocks for all future operations. Each of the farm communities constituted a co-operative society which had its own time of meetings to discuss important issues of production and marketing. During off-season periods the male-settlers could be offered jobs at the government's wage-rates for work to be done in connection with the Resettlement Programme. They were usually employed to build temporary compounds for those who would follow later. The project included road construction to link the various settlement sites, building of bridges and dams or sinking of wells and clearing of farms for the future settlers. These were the operations to which the old male-settlers were assigned with jobs on wages.

The welfare of the women-settlers was also taken care of. There were female Mass Education Assistants of the Social Welfare Department who took up literacy and sewing classes, housekeeping and child welfare education with the female settlers.

When the GDC became bankrupt and was liquidated, the Frafra Resttlement Scheme was handed over to the Department of Agriculture. The Scheme continued to show fair signs of progress except that the co-operative side of the Scheme it had to be dropped because of the difficulties involved for the settlers to show keen interest in co-operative activities. In 1964, the Scheme was still functioning well, only on a family operation basis, though many settler- families who could not cope with the conditions had left for their ancestral homes.[88] The failure and the end of the Scheme came in 1966, when the military government which came to power withdrew all funds in support of it and so the Department of Agriculture was compelled to withdraw its support of the staff. At any rate, through the Scheme several families have become settled and now rank themselves among the most enterprising farmers in Damongo district. The failure of the Scheme lies in its inability to change the cultivation methods of the farmers and not in that of resettling them.

The third post-war resettlement Scheme was the Volta River Resettlement Project. In this Scheme emphasis was also placed on Agriculture. In a report outlining the government's development policies in 1956, it declared:

> Agriculture to-day dominates the economy of the Gold Coast and will almost certainly continue to do so for many years to come. The growing of cocoa is of vital importance to the country, and, although the successful development of the Volta Project could be of great assistance to the Gold Coast Government in reducing the present dangerous dependence on this one major export as well as bringing other advantages, it is apparent that the greatest emphasis must continue to be placed on the further expansion and improvement of agricultural production.[89]

The proposals for the Volta Project itself was a huge one and we shall not discuss the whole Project here since it would require a thorough research of its own besides the agricultural part of it. Before the country's independence in 1957, the government's industrialisation programme called for the need for a permanent source of energy. It decided not only to develop the Volta River Project but also to do it on a large-scale to provide the country with a large supply of power as an opportunity to develop the industrial potentialities of the country.

According to the plan of the project, the 250 mile-long Volta lake would flood an area of 3,275 square miles, representing 3.6 per cent of Ghana's land surface. In practical terms, the impact of the area covered 26,000 square miles or a little over a quarter of Ghana. In 1960, this area contained 1,300,000 people representing 19 per cent of the country's population. The area was all rural, with a mean density of 53 persons per square mile, varying from 413 persons per square mile around Kpandu and only 11 per square mile in the East Gonja in the Northern Region.

All the flood victims were to be resettled and the earlier surveys indicated that the areas considered for resttlement sites were already populated with about 100,000 inhabitants whose needs for farmlands, fishing and industrial development had also to be considered.

The main guiding principles were that the resettlement should be used; first, as an opportunity to enhance the social, economic and physical conditions of the people; second, the settlements should be planned and located in a rational manner, so that the flood victims as well as the others in the area of impact could derive maximum benefits from the changes involved; third,

the agricultural system should be improved to enable the people to move from a subsistence to a cash economy.[90]

Upon the recommendations of the Ministry of Agriculture, the flood victims of the Volta River Project were to be settled on permanent farms and to be taught the modern techniques of farming.[91] The victims had previously been practising a system of shifting cultivation which demanded more land in their home-areas but it seemed apparent that under the resettlement programme the land available in the volta basin was bound to limit the traditional farm practices. Although the victims were to be paid compensations for their lost properties, the compensations would not be sufficient to enable them to invest in new farms the sizes of which would give them a reasonable income by using traditional agricultural methods.

The government's plan anticipated that, farming was to be on a co-operative basis, in which each family unit was to have its own farm plot to be cultivated by employment of farm machinery. The farm equipment was to be provided by the government while the purchase of farm materials and marketing of produce were handled by the co-operatives. The service-charges of the equipment were to be deducted and refunded to governmant chest after harvest.

The Agricultural Programme placed much emphasis on an intensive system of agriculture. Increased production on the farms was to provide sufficient food for the people and feed for livestock, an objective which embraced all scientific methods of farming.[92] On the labour side, it was planned that mechanisation would be introduced to the farmers so that it could gradually replace the use of traditional tools. Accordingly, tractors and implements suited to the local soil conditions would be used for initial clearing and all other land preparations and planting operations. There were some fears that the extent to which the mechanisation system was planned would tend to displace the existing farm labour which was formed by the contigent of the members of the family units. However, there was much left to be done with the family labour. The seasonal operations like transplanting of seedlings, thinning, and weeding as well as all the post-harvest processing of crops were to be carried out by the farmers themselves. Much time was also required for them to attend co-operative meetings and for marketing of the farm produce. Another area of argument was about the farmers' ability to use the farm machinery and the time it would take them to learn and to use it

efficiently for better results. "It was considered that in the same way that farmers in Ghana quickly learned to produce cocoa because it gave them good incomes, so the settler-farmers would also learn the new method quickly, provided it was demonstrated to them that they would get higher incomes from scientific farming."[93]

The problem of the provision of capital to the settlers was solved partly by the compensation they received from the government for their lost properties, and partly by the funds provided by the Volta River Authority to purchase heavy tractors to clear the land, while the cost of clearing land for farming was to be paid by the Ministry of Agriculture, which was also to provide the tractors for farming and the staff to undertake the execution of the programme.[94]

In the Volta River Resettlement Scheme, it was the location of the new towns that dictated the areas where the farms would be allocated to the settlers. "The selection of towns was mainly a question of achieving a satisfactory compromise between a variety of requirements springing from often conflicting social, economic and physical factors."[95] The planners would like to see an arrangement of several large groupings of people in a village since such an arrangement would ensure a wider range of services and facilities. How large each grouping of people could be depended upon the people themselves, to ensure that they were given every freedom of choice. It resulted in practice along ethnic lines confined within traditional lands of particular ethnic groups. The people's choice of sites was however subject to the planers' approval which was based on criteria for ease of access, potential water supply and capability of the land to support the expected number of people under the proposed system of permanent agriculture.[96]

In the exercise of the site selection for the village-settlement areas which in turn, determined the location of farms, their sizes and different soil types to support the crops and livestock, etc, several problems cropped up. First, there were difficulties in coming to a compromise with the people on suitable areas for both dwelling and farming purposes. It was because the people misunderstood the reasons for choice and advantages of the particular areas. Secondly, they were unprepared to be settled in a completely new areas where they were unfamiliar with the local conditions far away from homes of their kinsfolk. Thirdly, "where the settlers had to be settled on land belonging to people of other ethnic groups, compromises had to be found

which satisfied fears of insecurity of tenure, their need for farming land, loss of identity, fear of chiefs losing jurisdiction over their subjects, fear of becoming subordinate to others, attachment to traditional heads and fears arising out of beliefs in ill-omens".[97] Much time was needed to carefully work out plans and find solutions to all these problems.

By the end of 1962, the people had proposed 38 dwelling sites, out of which 35 received the planner's approval and confirmed as suitable after checking soils, availability of farming land, possibilities of getting water, ease of access and ease of construction. Some other sites were proposed by the Working Party.[98] In all 52 sites were approved and finally chosen after various compromises and concessions.[99]

Before the proposed agricultural programme could be implemented, at all, there was one difficult problem peculiar to the programme. The Krobo Community, at the south of Afram river had special ownership arrangements for the land they occupied by means of "huza" system. Under the system, group of individuals, not necessarily linked by kinship, pool their resources in order to acquire larger tracts of land for farming purposes.[100]

A large tract of land which these people had purchased and divided them into family strips of ten acres or more, was going to be submerged by the lake. Contrary to the Volta River Agricultural Resettlement Programme, these people were demanding the building of houses for them in their native homes[101] and cash to purchase farmlands themselves somewhere in the forest zones in the Ashanti Region. Although they were found right in their demands, it showed their distrust for the proposed farming programme and would serve as a bad precedent for other communities to follow. On the other hand, it was the hope of the Agriculturalists that the Krobos "offered the chance to demonstrate the superiority of the scientific farming practices being introduced,"[102] for other communities to follow. To lose the Krobo's therefore would be bad for the farming programme.[103] After long consultations and persuasions with their traditional chiefs a compromise was reached to settle them around Anyaboni and the Dede river, where forest reserve land was released to them.[104]

The time it took for the Agriculturists to persuade the people to agree to the proposed farm sites was too long. As a result, the acreages to be alloted to each of the family farming unit was reduced. It was initially pro-

posed that each farming family was to receive a 30-acre plot, but this was reduced to 12 acres of cropping field per family.[105] In order to catch up the season, only half of these crop-field-sizes to be developed for the first time.

The delay caused could not permit any work on the farms to be commenced in 1962. In 1963, a few farm areas were cleared and actual farming began.[106] Some areas were placed partly as experimental farm and partly as permanent farms; both types of farms were planted with cereals, legumes, tobacco and yams. The livestock farming came on later and by the end of 1964 eight settlements were in operation.

The supply of farm machinery was the major obstacle to farm expansion. Both heavy and light equipment were needed to take up clearing on time during planting seasons. From the beginning, the United Ghana Farmers' Co-operative Council and the State Farms Corporation promised to take up the assignment of the supply of suitable machines and equipment, but when the need arose, they never provided them. The little work performed on farms came about as a result of some equipment which was occasionally released from town-site clearing and road construction by the Volta River Authority.

We have stated earlier that the responsibility of encouraging resettlement farming of the flood victims in the Volta basin was placed in the care of the Division of Agriculture in the Ministry of Agriculture.[107] The Division's primary functions in the resettlement exercise were mainly two:

1. To select suitable resettlement farm sites to be developed into farming communities.
2. To undertake the planning and execution of the new methods of farming to be introduced in the resettlement areas.

Accordingly, there were to be three types of resettlement farming. They were individual title of ownership; Communal title of Ownership and co-operative farming. The individual ownership, where each settler was on his own, was thought to isolate him and deprive him from getting credit, to lack the advantages of organised marketing as well as to deny him the possibilities of getting better storage facilities or machinery and equipment which he could hardly afford to buy or hire them.[108] Under the collective ownership system, several people would farm the same block of land together and divide all the proceeds equally. The system "had the inherent disadvantage of unfairness,

since the laziest member would get the same (quantity of the proceeds) as the most diligent and would tend to bring the standard of the whole group down to his level.[109] In the circumstances, co-operative farming was thought to be the ideal system for the settlers because of the advantages of bulk purchasing and marketing of produce as well as the members chances for joint-responsibility for the high obligations involved in modern techniques of farming. A co-operative system would restore to its members a democratic say in the society's day-to-day management and that alone could help to make the whole scheme successful.

Again, it was found necessary to include the host farmers in the scheme so as to avoid the intense jealousies and hatred of the host farmers if they did not share in the benefits received by those who were resettled.[110] Should that happen hatred and litigation between the two modes would render the whole community unpeaceful to belong to and the project would collapse. As a result of this feeling, all the host farmers were included in the planning, thereby increasing the number of farm families to about 18,000.[111]

The Division of Agriculture had other committments to the rest of the farmers in the country and since the number of farmers involved in the resettlement project was already high enough to be handled by a separate organisation more efficiently, a separate division, "the Agricultural Resettlement Division" was set up to take-over the sole responsibility of the Agricultural Resettlement programme. While the new Division was to concentrate on the programme specially drawn up to aid the farmers who were displaced by the Volta lake, the Division of Agriculture ceased to handle the programme and concentrated on its former functions with the rest of the farmers in the country. Under the new plan, the Volta River Agricultural Resettlement Unit became directly responsible to the Minister of Agriculture. All the plans of the new Division were to conform to the general agricultural policy of the government, as set out in the Seven-Year Development Plan.

The programme of agricultural resettlement was considered as a sequence of six phases thus:

Phase I: Data already available was to be collected and collated, financial and staffing estimates drawn up and resettlement sites provisionally selected.

Phase II: Detailed surveys were to be carried out in the areas provi-

sionally selected to assess accurately how many people could be resettled and to facilitate agricultural planning within the resettlement area.

Phase III: Involved planning the agricultural programme within the selected areas, co-ordinating the programme and drawing up detailed estimates for the plan.

Phase IV: The programme of preparation before settlement was to be executed.

Phase V: The agricultural plan was to be implemented, with evaluation and reorientation as necessary.

Phase VI: There was to be further development.

Since there was a fixed time limit imposed by the dam construction programme, Phase V was to be begun within a maximum of four years from the start of the whole exercise.[112]

Although surveys for the entire Scheme had been carried out, it appeared that information required for agricultural development was either lacking or insufficient for particular resettlement areas. For example, the number of people already on the land and the number to be resettled in addition to them was necessary to plan the farm sizes. The topography, vegetation and the existing soil type of any particular area was needed to determine the type of crops to be grown, etc. Once a settlement site had been agreed upon with the settlers the agricultural unit surveyed it in much detail.

A special pattern of cropping system evolved as a result of the information collected during the agricultural survey. The hilly areas were to be planted with tree crops while the fairly undulating parts could be used for arable farming; with soil conservation measures. The flat land areas were to be used for mechanised farming by using the local crops[113] on the system of rotation based on the experience from the agricultural stations.

In the Northern savannah areas, emphasis was placed on livestock farming by introduction of hardy breed of goats, sheep and cattle. In areas where the existing conditions favoured both arable and livestock farming they were encouraged to practise mixed farming.

According to the plan, a separate area outside the settlers' farms was to be set aside for carrying out crop and livestock trials to find out the problems that would be connected with the system to be introduced to the farmers.

Most of the settlers lived in the forest areas, therefore it was decided that forest land would be suitable for the trial farms since it offered the chance to test the type of machinery required for the operation of the settlement farms. The selected area was developed for tree cropping, arable farming and livestock production on a large-scale.

The overall agricultural pattern in the Scheme was to reflect the needs and targets of the seven-year development plan. "In this agricultural plan, local cash and export crops were to be developed to conserve and earn foreign exchange, but equal stress was placed on arable farming to produce foodstuffs for human consumption and feed for livestock, thus improving nutritional standards particularly through supplying more protein."[114] The feed for livestock, such as pigs and poultry, was to be obtained from the staple food for human consumption. Thus, unless production was planned on a large-scale and yields on farms became in excess of human needs at a relatively low cost livestock would continue to compete unsuccessfuly with humans.[115]

Bearing in mind the volume of production that was required under the plan and the limited resources of farm machinery and capital available, 42 per cent of the settler population was assigned to arable farming in which they would also produce grass and legume hay in their rotation system.[116] For a long time in his life, the emerging settler arable farmer had been growing all kinds of local crops by employment of primitive tools on shifting cultivation basis. This time, he was not only being resettled permanently in a new area entirely, but also he was being induced to change over completely to a new system of farming. How large a land area was he to be allocated? Probably a large area would induce him to stay in one place and give him the chance of growing all the crops he was used to and at the same time allow a portion of it to rest on fallow. The land should be large enough to give him the opportunity to earn sufficient income annually, perhaps to the same level as his counterparts in livestock farming. On the other hand, the land should also not be too large that he could not develop it efficiently, particularly when he was not well conversant with the new production methods. "The arable farmers were given a minimum of 12 acres each for mechanised farming with provision for expansion to 30 acres at a more distant time after consolidation. The rest was as follows:[117]

	Minimum	Maximum
Tree crop farmers (44% of the population) -	5 acres	15 acres
Intensive Livestock farmers (16.4% of pop.) -	3 "	- "
Pastoral farmers (5.8% of the population) -	30 "	- "

Under the traditional system of farming a farmer normally cultivated about 1 1/2-2 acres but controlled two or three plots, totalling 6-10 acres, using the shifting cultivation system. If farm mechanisation were to be introduced without altering the farm sizes, the tractor would have to travel from farm to farm through bush and sometimes would be difficult to turn. The system would then be a loss of output and damage to the tractors and implements. The new system with expansion of farms would make existing conditions less difficult for mechanisation.

The farmers were grouped into co-operative societies. Each of them was either an arable farmer or a tree crop farmer or a livestock farmer. Each group formed a co-operative society and each society elected few members to a central co-operative body. The central body controlled the overall activities of the farm and was responsible for the marketing of produce, bulk purchasing of fertilizers, etc. and all other tasks that were expected of a central co-operative body.

Late arrival of the heavy machines to make the initial clearing as well as other minor problems, did not make the arable farmers show up well. The livestock farmers showed much progress in the pilot schemes at some of the settlement areas. Each poultry farmer was provided with a broiler house, day-old chicks, feed and drugs and was supervised by a trained technician. He had 2000 broilers at a time and reared four batches a year totalling 8,000. He made a net profit of 1s. Od. on each broiler sold to give him an income of £ 400 a year. The pig farmer was provided with four pens, each had a capacity of 20 fatteners. He was supplied with 20 weaners of 8 weeks old every month. After an initial interval of four months he was able to market 20 pigs per month; at a profit of £ 2 on every pig to give him an income of £ 480 per annum. The broiler scheme showed the greatest an most continued success. About 250,000 broilers were distributed to the poultry farmers during the first year of the scheme.[118]

Apart from a few isolated cases, the overall impression about the entire agricultural resettlement scheme was a failure. The cause of the failure might

be attributed partly to the late arrival of the farm machinery and partly to inadequate supervision, particularly of the machine operators whose efficiency on the job left much to be desired. This was not meant to say that nothing came out from the scheme. In fact a reasonable number of the farmers who were resettled lived in the areas and did their normal farming while others who felt that they could not cope with the new conditions left.

For our purpose, the main interest about the agricultural resettlement scheme was that a new system of land ownership emerged through a process of settlement and land acquisition, quite different from the traditional type. According to the new process, the settlers were compensated by the government for the loss of their ancestral home-land. The host population or the owners of the land of resettlement received compensation for the loss of their landed properties[119] as a result of the rehabilitation projects. The negotiation for the acquisition of the land itself was made by the government on behalf of the settlers. In theory, there were two possibilities to get the land for the settlers. It could be purchased outright or rented and charged to the settled farmer who received it and cultivated it. In this particular case the land was purchased outright. In practice, however, the cost of the land was met by the compensation paid to the host-owners of it while the price the settled farmer paid was by his willingness to move and the inconveniences in moving to the new land. In real terms, it was the government who paid all the money involved in the transaction. Hence under this new land tenure system, it was necessary for the government to ensure that the land was farmed properly according to the plan laid down, and to insist, with legal backing which was to be provided, that the government had the right to evict a farmer if he failed to conform to what were known elsewhere as "good husbandry practices". These formed the compensation for the government in such land transactions.

The new system of land ownership by settlement had several advantages. Firstly where a settler successfully changed over to scientific farming he had the opportunity to increase his farm income. Secondly, because his title to the land was conferred on him through a careful process of land tranaction in which the government was involved, he was legally protected and had security of ownership. Thirdly, since the land was properly surveyed and demarcated into farms of permanent boundaries it would be free from future litigations and disputes which could, otherwise have blocked the farmer's chances for credit. Fourthly, even if the farmer died intestate his suc-

cessor would have no problem to take over the ownership because of titles to the land.

4.6 Co-operative Ownership

The main purpose for the formation of co-operative organisation in Ghana was to help the farmers to improve the quality of their produce and to eliminate the middlemen who bought the produce cheaply from the farmers and sold it to the representatives of the manufacturers at exorbitant prices. "During 1925 and 1926, a large number of shipments of Ghana cocoa was refused entry into the United States because of its poor quality."[120] The Department of Agriculture was compelled to introduce a system of compulsory inspection of all cocoa for export and hoped that the certificates it granted after each inspection "would serve as a reliable basis for commercial transactions, and induce merchants and manufacturers to differentiate prices according to purity".[121] The Department observed that it was necessary to introduce differential prices according to different grades of cocoa, if the farmers were to be encouraged to improve the quality of their produce. The individual farmers' production was on such small scales that one person could hardly sell his produce direct to the merchants and the manufacturers. The profit margin for the middlemen at the expense of the farmers, was too high. The producers were aware of such a situation but they had no means to eliminate the middlemen. In an attempt to help the farmers to do away with the services of the middlemen, the Department of Agriculture began to organise the farmers to group themselves for the purpose of selling their cocoa in bulk quantities direct to the merchants. It was recognised that the objective could be achieved through the encouragement of the farmers to form co-operative organisations.

Another objective of the Department was that, once co-operative societies had been formed, it would be easy to persuade the farmers to become more commercially minded in all their farm obligations by making best use of their spirit for communal working, naturally inherited in Africans and to develop that spirit to help themselves on co-operative basis. The co-operative organisation would also help the peasants to acquire the spirit of "joint-responsibility", self-help and neighbourly assistance and provide facilities for savings in their commercial dealings.

The development of co-operatives in Ghana began in 1928 and the entire or-

ganisation and its activities since that time were described by observers as "essentially government initiated, government directed and government controlled".[122] The entire administration and control of the activities of co-operative societies were in the hands of the staff of the Department of Agriculture. This staff who were responsible for the development of co-operative institutions were themselves neither by training nor experience suited to the supervision of associations mainly characterised by the economic interests of their members. Co-operative development was not preceded by any form of education, hence the farmers were sceptical about the purpose and therefore opposed to the scheme. The farmers' main interest in the venture was money, while the government insisted on quality of cocoa.[123]

The first five-year period (1928-1933) witnessed the practical aspects of the organisation. The Department of Agriculture was empowered to build group fermentaries for the farmers in the areas "where the first co-operative societies were formed at Otoase and Obodan in the Nsawam district, and at Atasomanso and Kokobeng in the Kumasi Area".[124] By the time the societies were formed, Cadbury & Fry Company which was one of the largest purchaser of Ghana cocoa was highly interested to see improvements in the quality of cocoa. The company offered 2s. above the normal price paid to farmers and detailed its staff to go to the field to advise the farmers about how best they could obtain high quality cocoa.

Another aspect of the Co-operative organisation during the early period of its introduction was the first Co-operative Societies Ordinance introduced in the country. The Ordinance was introduced in 1931 and its provisions were essentially relief measures. "The origins of the ordinance were Sri Lanka, Mauritius and India. Unfortunately, the ordinance was a flop since its provisions which, aimed at curbing the indebtedness of farmers had very little or no relevance to the situation as it existed in Ghana at the time."[125]

The staff position of the organisation was very poor and the Department of Agriculture was compelled to second its officers to take up the supervision of the co-operative activities. When the co-operative societies were established, they continued to show increasing numbers in membership but some members were reluctant to sell their produce through their societies because they wanted to see the soundness of the whole movement and how reliable their societies were. However, with the new arrangements for incentives and facilities for credit it soon became necessary for such members to sell their

produce through their societies. Another obstacle to the movement was that the farmers knew of no other crop for export than cocoa and buyers paid less attention to the purchase of other agricultural produce. Although none of the co-operative societies were legally registered during this early period, there was considerable progress in the organisation and the general performance of the societies.

1933-1939 was the period of consolidation and clarification in the history of co-operative organisation in the country. There were important events among which were the arrival in the country of two British experts on co-operatives, Professor C.Y. Shephard, of Department of Economics at the Imperial College of Tropical Agricultures, Trinidad; and Sir Frank Stockdale, who was the Agricultural Adviser to the Secretary of State.[126] "the experts arrived in Ghana during 1934 and 1935 period upon the invitation of the government purposely to advise it on the best method of improving the co-operative institutions in the country. Among the recommendations of the experts was the need to de-officialize the co-operative system which was until then dominated by government officials. This was a measure to give greater autonomy to the co-operative societies."[127] Another Ordinance, the co-operative societies ordinance (No. 15 of 1937) was passed to replace the ordinance of 1931. The new ordinance sought to incorporate the major recommendations of the experts in its provisions but they could not be put into full action before the crisis which led to the "Cocoa Hold-Up" and later the Second World War started. In spite of the little progress of the co-operative organisation, cocoa producers' societies soon started during the 1937-1939 period. The whole cocoa industry in the country was affected by the 1937-38 "Hold-Up" of cocoa producers. It was not the co-operatives which initiated the "Hold-Up" but they were in sympathy with the action of other farmers and so had to join the "Hold-Up".[128] As a result, only about 400 tons of cocoa which had already been purchased prior to the "Hold-Up" was sold by the society during that period. It was the first time that the failure of the organisation began to show. There was no means of repayment of the loans that had been previously granted to society members. The subscription to new share capital fell greatly during the two-year period.[129]

Barely a year after the crisis of the cocoa "Hold-Up" the War broke out in 1939 when the co-operative was still showing signs of unhealthiness in its organisation. By 1940-41, it was clear that the organisation was about to be paralysed by debts and disloyalty of its members. The Department of Agri-

culture was compelled to pursue a new policy of consolidation. The policy sought to close down the inefficient societies as well as to dismiss disloyal members. According to La Anyane,[130] it was the adoption of this policy and granting of a premium of 12s. 6d. per ton of cocoa by the Association of West African Merchants on all non-quota cocoa marketed by societies which resulted in these societies having a more satisfactory year. Thus by the new consolidation policy, the co-operative organisation did not die out but its activities were restored.

During the war period, the main programme of agricultural development was the extension of co-operative organisation to food farmers outside the cocoa producing areas.[131] Another important development was the consumer co-operative movement which emerged during the war, first as a result of increased population which had given rise to a new urban section; and secondly, from the pressure of the farm organisations whose interests were being threatened by black marketing and conditional sales of consumer goods and therefore appealed to the federation to use its good offices to get supplies. The consumer societies had altogether a membership of 3,716. It failed because of a merchant who was brought into it.[132]

By the time the war was about to end, the co-operative organisation had shown fair signs of recovery and the activities of the societies were in progress. It was discussed in certain higher circles that there was a need for a separate Department to be charged with the sole responsibility of the supervision of the co-operative organisation throughout the country. The Department of Co-operation was, therefore, established on 1st April, 1944. The new Department was to undertake the training of co-operative personnel as well as to specialise in the investigations of all problems connected with co-operative matters. It would be recalled that until the outbreak of the Second World War, the main work on co-operative development was on cocoa. The war brought a number of economic problems which required the desire to diversify the activities of co-operative societies. Accordingly, "the Department of Co-operation was given statutory powers of registration, audit and supervision of co-operative societies, holding of arbitration and inquiry on co-operative societies, and liquidation of such societies that are economically in-effective".[133]

The Department of Co-operation was headed by a Registrar, appointed by the Government. "In 1950 the newly formed co-operative Department declared

its policy thus:

(i) the diversification of Agriculture from cocoa
(ii) the encouragement of a co-operative bank
(iii) the formation of the consumer group centred on the newly formed co-operative wholesale establishment."[134]

Before the outbreak of the war, granting of loans within co-operative societies was fairly efficient in terms of repayment. The main problem was in the expansion of the organisation which was obviously accompanied by an increase in demand for credit. In 1951, new co-operative societies were formed in Northern Ghana to cater for the financial needs of the hoe-farmers who were changing over to bullock-plough system of farming. Along the coastal areas, too, societies of fishermen were formed to financially help in the collective purchase and operation of newly introduced powered fishing boats.[135] The amount issued and covered within the co-operative movement was as follows:

Table 13

Copoperative Society Loans - 1945-56

Period	Loans issues in Pounds	Loans received in Pounds
1945-6	11,444	10,991
1946-7	15,566	16,261
1947-8	32,991	30,629
1948-9	66,013	62,257
1949-50	86,940	77,287
1950-51	110,626	107,774
1951-52	216,040	191,137
1952-53	294,166	269,635
1953-54	455,502	405,123
1954-55	526,037	413,138
1955-56	470,875	413,671

Source: S. La Anyane - "Ghana Agriculture" - O.U.P. - 1963 - p 187.

During the independence period co-operative organisation became part of socialist agriculture. The control and management were entrusted to the United Ghana Farmers Council Co-operatives (UGFCC). The UGFCC's functions were more complicated than those of other socialised Units. It was initially established to undertake purchasing of all Ghana's cocoa on behalf of the Ghana Cocoa Marketing Board (GCMB). These functions were formerly performed by the foreign buying agents (Cadbury & Fry, etc.) and the co-operative unions in the country. The UGFCC was later, assigned the responsibility of establishing farms on large-scale mechanisation basis as well as to take

over the functions of extension work of the Ministry of Agriculture. The Extension Services Division of the Ministry was dissolved and its entire personnel seconded to the UGFCC. The Unit assumed full responsibility of administration, and organisation of the three most important functions in the agricultural sector - Cocoa Purchases, Mechanical Agriculture, Extension Services. All of these were to be successfully undertaken within the general framework of the ruling party's ideological stand, thus:

"1. to foster and promote unity for purpose and action among farmers and improvement of agriculture and allied industries [. . .]

2. to safeguard the interests of farmers of the country so that they may [. . .] aspire towards complete emancipation from all forms of exploitation and economic servitude;

3. to be the spokesman of the farming population on all matters relating to agriculture [. . .]

4. to give instruction and advice to its members on agricultural problems."[136]

On the basis of these objectives, the UGFCC consisted of two main branches - the cocoa purchasing branch and the combined mechanised food production and extension services branch. Seidman[137] observed, "the UGFCC was very successful in one major respect. It moved cocoa to the ports efficiently. Its inspection service, initially assisted by Cadbury personnel, succeeded in improving the quality of cocoa significantly. The foreign buyers were satisfied with the performance". Regarding the other branch, "the UGFCC did little to encourage farmers to utilize more modern methods to increase output per acre. Efforts to augment output through any form of producer co-operatives were rejected [... .]"[138]

There were many obstacles which were connected with the UGFCC's co-operative organisation, but only few of them will be considered here for our evaluation of the new set up. A co-operative mechanised farming requires a large tract of land. Apart from the sparsely populated Northern and Upper Regions, it was difficult to acquire large tract of lands as were necessary for a local co-operative society without having to interfere with the peasants' food farms or cocoa areas. In few cases, the UGFCC could acquire land for a society in a locality but later would receive a delegation of members from the same society protesting against the acquisition of the land because the action deprived them of their private farming interests. In the Southern Regions, since it was difficult to get a large tract of unused land for co-operative farming, the UGFCC appealed to as many small group of farmers as

were available in any small locality in each district to form a co-operative society. In certain cases, a family unit of less than 10 relatives constituted a co-operative society. Another approach was to allow individual farmers to join a co-operative society but to allow them to cultivate their own holdings individually and separately from the co-operative farms. By this system the farmers did not loose their family unit holdings. In practice, there was nothing which resembled a co-operative society except by the name and the registration certificate or the membership cards which helped to get tractor services on their holdings. The holdings were small in sizes and scattered and therefore only helped to increase the costs of mechanisation. Even in the districts where the UGFCC managed to procure large tracts of land for co-operative farming, the society members showed little interest in the co-operative farming activities. It was because, for one reason, they did not willingly join the co-operatives but with political pressure and for another reason, they regarded their own family unit holdings as better sources of family subsistence.

4.7 Conclusion

We have so far, established the fact that, the system of land ownership is based on the institutional structure of the society and that because there has been no change in the institutional set-up, there has also been no change in the land ownership system. We assume that it is the institutional framework of the society that prevents the basic changes in the ownership system. Contrary to this assumption, Gunnarsson[139] seems to have been impressed by Sara Berry's point in her study in Western Nigeria that, "traditional institutions do not necessarily constitute an obstacle to economic development"; but he does not state whether his study in Ghana confirms Berry's impression. The institutional structure is the principal cause of insecurity of landholding as well as other hinderances to agricultural development in Ghana. We shall soon come to this point.

Our analysis shows that the changes that have taken place are the utilitarian aspects of land. These are essentially, the mode of production and the organisation of the communities. The utilitarian aspects reflect on the owners of the land. Some recent writers[140] share the view with us that farming takes place on a family unit basis, though they do not make it clear, as we have emphasised that the farms are developed, first on a small scale expanding gradually to a large holding unit and then, again, into small farm

sizes due to the increase in the members of the family unit.

Polly Hill and others[141] observe that the institutional arrangement ensures easy entry into the farming pool of ownership. We do not deny this fact, but it is obvious that the character of small sizes of farms each of which permit less economic use of it is due to such "easy entry". Because the institutional arrangement and the tenure system are such that no member of the community should be deprived of his share of land, every member seeks to exercise his right to procure land. The result is not only the small sizes of farms but also it gives rise to a large area of uncultivated or misused land because the exercise of rights does not mean willingness of cultivation.

We must not forget that it is the institutional structure that determines the land tenure system, and not vice versa. The two are inter-dependent variables which contribute to the insecurity in the ownership. In any traditional society where there is less security in land ownership, the cultivators will feal reluctance to change to improved methods of farming unless the new methods can be undertaken at comparatively very low cost. This is the magic of the success of Ghana's cocoa industry. The industry demands simple, readily available non-expensive tools. The ownership of areas of cultivation is recognised so long as there is evidence of the presence of cocoa trees and the cultivator's non-refusal to owe allegiance and pay tribute to the local Chief. Against this background, we can imagine how uneasily the farmers would be, since the post-war II period of change from traditional farming to another system of cultivation in which there was a need for registration of land in addition to the purchase of expensive tools, etc. Owing to the institutional arrangement the pre-requisites for registration of land alone would cost so much that an average cultivator could not afford to pay.

Although Polly Hill's studies[142] reflect indirectly on the abuses of the native institutional arrangements and directly on the capitalistic behaviour of the cultivators, she does not state that the institutional arrangements are obstacles to development, Gunnarsson[143] seems to have disagreed with Hill on her point of the capitalistic behaviour of the producers. Perhaps he would agree, however, that the produceer's behaviour was economically rational in response to market forces.

At a historical stage when the increase of the population was exerting pressure on the land and cultivation methods could not increase production to the level of the relative increase of the people, the State had to step in to shoulder the responsibility for a change. The destitute families living on over-populated poor soils had to be re-settled in fertile less populated areas. Those whose life and landed properties were threatened because of a project of national interest were also resettled somewhere. Owing to the hindrances of the traditional institutions to security of ownership of land and improved cultivation methods, the State took upon itself to acquire land and apportioned it into reasonable sizes of holdings for the settlers. By disseminating the information about the modern methods of farming through practical means, it was hoped that new strata of farmers would emerge to supply the food needs of the growing population. Unfortunately, the State's policies were all a failure and the peasant cultivator family unit had to be pulled back by his traditional ties and cultivation methods.

References

1. Gunnarsson, Christer - "The Gold Coast Cocoa Industry - 1900-1939" - Production, Prices and Structural Change - p 51.
2. See Beckett, W.H. - "Koransang Cocoa Farm - 1904-1970" - Technical Publication Series No. 31 - Institute of Statistical, Social and Economic Research - Legon; and also his "Akokoaso: A Survey of Gold Coast Village" - Monographs on Social Anthropology No. 10, London: London School of Economics & Pol. Science - 1947.
3. Valley, W.J. and White, H.P. - "The Geography of Ghana." - p 152.
4. Boateng, E.A. - "A Geography of Ghana" - p 64.
5. Polly Hill - "Social Factors in Cocoa Farming" - in Wills, J.B. (ed.) - Agriculture and Land-Use in Ghana - p 278.
6. Torto, J.O. - "History of Cocoa in Ghana" - in The Ghana Farmer - Vol. III - No. 3 - August, 1959 - p 89.
7. The Report on Ghana Sample Census of Agritulture - 1970 - Vol. I - Economic and Marketing Division - Ministry of Agriculture - Accra, March, 1971 - p 69.
8. See Beckman, B. - "The distribution of Cocoa Income, 1961-65" - Seminar Paper presented at the Department of Economics - Legon - 1970 in "Economics of Cocoa Production" - Legon, April - 1973.
9. One load of dry cocoa is equal to 60 lb.
10. See "The Report of Ghana Sample Census of Agriculture - 1970 - op.cit. - p 69.
11. This is the average full bearing yield in Ghana during the Production

Period of the early 1960s. - See Birmingham, W., Neustadt, I. and Omaboe, E.N. - "A Study of Contemporary Ghana" - Vol. I - 1962 - p 242.

12. By computing the contribution of the farmers' production in Beackman's sample, we get 366 lb. of yield per acre.

13. Okali, C., Owusuansah, M., Rourke, B.E. - "The Development Pattern of cocoa Holdings in Ghana: Some case studies" - in "Economics of Cocoa Production" - op.cit. - p. 174.

14. See "The Report of Ghana Sample Census of Agriculture" - op.cit. - p 30.

15. Sources to Okali, C. and others - op.cit. - p 174.

16. The native farmers claimed that cocoa farming in the village began in 1920's but they started to develop their holdings about 1936.

17. For more information about the Ghanaian customary system of land ownership, read, Hayford, Casely, - "Gold Coast Native Institutions".

18. He may pay about ¢ 20.00 per acre plus a bottle of schnapps to the stool - both cash and drink referred to as "drink"; before the rights of use are conferred on him. In this particular village, once the cocoa is fully bearing, an annual rent is paid to the stool by stranger farmers. The annual rent paid depends on the size of the land involved, the amount of cocoa produced and one's association with the stool.

19. & 20. It was not told how much capital in cash he started with.

21. It was not known whether the farm was used for that purpose.

22. A recent work in Brong Ahafo Region gives an estimate of 2.2 acres cleared on average per year. The largest single clearing (in the same survey) gave 8.5 acres, and this was computed with the assistance of an annual labourer and sets of contract labourers to weed throughout the first year. - See Okali, C. (1974) - "Labour inputs on Cocoa Farms" - in Economics of Cocoa Production op.cit.

23. According to Beckett, when a farm of 88.8 acres was fully established at Koransang in 1936, an average annual clearing of 2.8 acres only was made. The largest clearing of 13.3 acres was made 28 years after first planting - See Becket, W.H. (1972) - "Koransang Cocoa Farm" - 1904-1970: - Technical Publication Series No. 31 - Institute of Statistical, social and Economic Research - Legon.

24. This is a typical example of farm indebtedness in Ghana. Once a farmer is in debt, the problem of shortage of cash becomes higher with the amount of interest charged on the loan obtained.

25. Use the same designations for sites as in the case of farmer No. 1.

26. Virgin Forest.

27. The case of the children can be analysed in the same way as the women; hence we need not to explore further.

28. The author has the Akan customary law in mind since cocoa cultivation is mostly in Akan tribal lands.

29. Polly Hill - "The West African Farming Household" - in Jack Goody (ed.) "Changing Social Structure in Ghana" - p 123.

30. A Department of Agriculture Survey referred to in "The Ghana Farmer" - Vol. II No. 2, May 1958 - p 70.

31. See Beckett, W.H. - "Akokoaso: A survey of Gold Coast Village" - op.cit.

32. See the 1948 Population Census Official Report.

33. See Okali, C. and others - "The Development Pattern....." - op.cit. - p 174.

34. See Polly Hill - "The West African Farming Household" - op.cit. - p 121.

35. When the woman finally emerges as an independent holder the mutual relationship becomes impaired.

36. There are isolated cases of this in Brong Ahafo Region.

37. See Reid, J.D. - "Sharecropping and Agricultural Uncertainty" - in Economic Development and Cultural change - Vol. 24, No. 3 - April, 1976 p 549. Also Cheung, S.N.S. - "Private Property Rights and Sharecropping" - in Journal of Political Economy, - Vol. 76, No. 6 - Nov./December - 1968 - p 1107.

38. See North, D.C. and Thomas, R.P. - "The Rise of Western World" - p 39.

39. Rourke, B.E. and Sakyi-Gynae, S.K. - The Agricultural and Urban Wage Rates in Ghana - The Economic Bulletin of Ghana - Second Series, 1972 - p 8.

40. The Report of 1970 Ghana Sample Census of Agriculture - op.cit.

41. See Polly Hill - Social Factors in Cocoa-Forming - in Wills, J.B. (ed.) op.cit. - p 278.

42. A survey conducted by the Author in 1968 for forecast of yield of crops in Axim District.

43. Uchendu, V.C. and Anthony, K.R.M. - "Field Study of Agricultural Changes, - Bawku District, Ghana." Economic, Cultural and Technical Determinants of Agricultural Change in Tropical Africa, Preliminary Report, No. 7 - Food Research Institute. Stanford University - March, 1969 - p 20.

44. Observations during 1970 Ghana Census of Agriculture - op.cit.

45. See Rourke and Sakyi-Gyinae - op.cit. - p 9.

46. Annual crops are maize, groundnuts, etc.

47. See Nukunya, G.K. - "The effects of cash crops on an ewe community" - in Jack Goody (ed.) - "Changing Social Structure in Ghana" - pp 62-63.

48. See Ollenu, N.A. - "Principles of Customary Land Law in Ghana" - p 103.

49. See Nukunya - op.cit. - p 63.

50. See Lewis, W.A. - "Economic Development with unlimited Supplies of Labour" - The Manchester School of Economic and Social Studies - Vol. xxii - No. 2, May, 1954 - p 141.

51. See Gulmer, P.H. - "Labour Migration in a Rural Economy" - EAISR - East African Studies - No. 6, Kampala - 1955.

52. See Goddard, A.D. - "Population movements and land shortages in the Sokoto close-settled zone, Nigeria" - in Samir Amin (ed.) "Modern Migrations in West Africa" - p 258.

53. Ibid - p 259.

54. Grove, A.T. - "Population densities and Agriculture in Northern Nigeria" - 1961.

55. See Gulliver, P.H. - "Labour Migrations in a Rural Economy" - East African Studies, No. 6 Kampala, EAISR - 1955.

56. Skinner, E.P. - "Labour Migration among the Mossi of Upper Volta" - in Kuper, H. (ed.) - "Urbanisation and Migration in West Africa" - pp 60-84.

57. Pauvert, J.C. - "Migration of Workers from Togo to Ghana" - Migration News 4, 1958 - pp 4-7.

58. The discussions are partly based on Beals and Menezes' approach to the problem and partly on the Author's own experience in the Agricultural field.

59. Zelinsky, W. - "The hypothesis of the mobility transaction" - Geographical Review - No. 61 - 1971 - p 219.

60. See Gould, W.T.S. and Prothero, R.M. (1971) - "Space and Time dimensions in the study of population mobility in Tropical Africa" - Paper presented at the conference on African populations, International Union for the scientific study of population - Accra - as quoted by Goddard, A.D. - op.cit. - p 258.

61. See Kuper, H. - "Urbanisation and Migration in West Africa - University of California Press - 1965 - p 61.

62. See Beals, R.E. and Menezes, C.F. - Migrant labour and Agricultural output in Ghana - in Oxford Economic Papers (New Series) - Vol. 22 - No. 1, March, 1970 - p 109.

63. See Skinner, E.P. - op.cit. - p 63.

64. Ibid - p 63.

65. This is the method used by Beals and Menezes - op.cit. p 10 which we adopt.

66. Beals and Menezes - op.cit. - p 10.

67. If by subsistency we mean, continuous farming all the year round to get food from the farm to feed the family household.

68. Botei-Doku, E. - "History of Ghana Agriculture and causes of our present problems" - in "Ghana Talks, Ghana Past and Present" - p 148.

69. See Berg - As quoted in Kuper, H. (ed.)

70. Beals and Menezes - op.cit. p 111 - see the diagram of Beals and Menezes - op.cit. - p 116.

71. Rourke estimated their number to be 30,400. See Rourke, R.E. - "Wages and incomes of Agricultural Workers in Ghana" - Technical Publication Series - No. 13 - ISSER - University of Ghana - Legon - 1971 - p 25.

72. See the Report of Ghana Sample Census of Agriculture - op.cit. - p 39.

73. These are Eastern, Ashanti and Brong Ahafo Regions.

74. Rourke and Sakyi-Gyinae - op.cit. - p 6.

75. See Adomako-Sarfoh, J. - "The effects of the expulsion of migrant workers on Ghana's economy, with particular reference to the cocoa industry" - in S. Amin (ed.) - Modern Migrations in West Africa - p 146.

76. See Rourke and Sakyi-Gyinae - op.cit. - p 9.

77. Polly Hill - "Social factors in cocoa farming" - in Agriculture and Land-Use in Ghana" - J.B. Wills (ed.) - p 284.

78. Ghana Sample Census of Agriculture, 1970 - op.cit. - p 42.

79. See Rourke and Sakyi-Gyinae - op.cit. - p 9.

80. See the 1970 Census of Agriculture - op.cit., and also Rourke and Sakyi-Gyinae op.cit.

81. Rourke and Sakyi-Gyinae - op.cit. - p 9.

82. Uchendu, V.C. and Anthony, K.R.M. - "Field Study of Agricultural Changes - Bawku District - Ghana" - Economic, Cultural and Technical Determinants of Agricultural Change in Tropical Africa, Preliminary Report No. 7 - Food Research Institute - Standford University - March, 1969 - p 20.

83. The "rope" is the local unit of measurement of length defined in terms of arm stretches; *abasam* in Twi language.

84. See Adomako-Sarfoh, J. - op.cit. - p 147.

85. This is based on the Author's own estimate.

86. For early history of resettlement of Ghana read: Dei-Anang, M. - "Ghana Resurgent".

87. Anyane, S. La - "The Ghana Agriculture" - pp 156-7.

88. The Author was a Technical Officer of the Department of Agriculture involved in the Scheme from 1959. He was transferred to Southern Ghana in 1964.

89. The Volta River Project, Vol. I: Report of the Preparatory Commission - (VRP 1) HMSO - London - 1956 - p 64.

90. See Kalitsi, E.A.K. - "The organisation of Resettlement" - in Chambers, R. (ed.) "The Volta Resettlement Experience" - p 39.

91. The proposal was in line with the Government's Seven-Year Development Plan.

92. Better soil selection for special crops, using of improved seeds and livestock; application of fertilizers and manures as well as the use of insecticides and fungicides to control farm diseases and pests, etc.

93. Kalitsi, E.A.K. - op.cit. - p 42.

94. See Ibid - p 42.

95. Ibid - p 49.

96. Ibid - p 49.

97. The natural conservatism of rural people, their desire for independence and long standing dislikes among particular groups added to the difficulty of compromise.

98. Ibid - p 51.

99. See Ibid - p 51.

100. See Pogucki, R.J.H. - "The main principles of rural land tenure" - in Wills, J.B. (ed.) - "Agricultural and Land-use in Ghana" - p 182.

101. Their homes were around Krobo Odumasi in Manya Krobo and Somanya in Yilo Krobo, far away from the planned Resettlement Area.

102. Kalitsi, E.A.K. - op.cit. - p 51.

103. Krobos are known to be one of the best tribal farmers in Ghana.

104. These villages are in the Affram Plains in the Kwahu District.

105. Kalitsi, E.A.K. - op.cit. - p 55.

106. Ibid - p 55.

107. A separate Agricultural Resettlement Division was later set up.

108. Nicholas, M.S.O. - "Resettlement Agriculture" - in Chambers, R. (ed.) - "The Volta Resettlement Experience" - op.cit. - p 205.

109. Ibid - p 205.

110. See Ibid - p 205.

111. See Ibid - p 206.

112. Ibid - p 206.

113. These were mainly maize, groundnuts and tobacco, etc.

114. Nicholas, M.S.O. - op.cit. - p 209.

115. See Ibid - p 210.

116. Ibid - p 210.

117. Ibid - p 211 - The percentages do not add up to 100 because of some overlap especially for some of the tree crop and livestock farmers also in the arable farming group and so on.

118. Ibid - p 213.

119. Compensation in the form of houses and other social amenities toward better living conditions. The landed properties included crops on the farm, fetishes and shrines which were destroyed as a result of clearing.

120. La Anyane, S. - "Ghana Agriculture" - op.cit. - p 148.

121. Shephard - op.cit. - p 16.

122. See Daily Graphic, Wednesday, August 17, 1977 - p 5.

123. Ibid - p 5.

124. La Anyana, S. - op.cit. - p 149.

125. Daily Graphic - Wednesday, August, 17th - 1977 - p 5.

126. Ibid - p 5.

127. See Part IV of the Report on the Economics... by Shephard - op.cit. p 26.

128. This is the impression of La Anyane - See "Ghana Agriculture" - op.cit.

129. La Anyane, S. op.cit.

130. Ibid - p 153.

131. There were 14 food-crop societies in Atebubu and Duan districts; and 2 vegetable societies at Swedru and Nsawam districts.

132. See La Anyane - op.cit. - p 153.

133. Daily Graphic - op.cit. - p 5.

134. La Anyane - op.cit. - p 154.

135. Ibid - p 187.

136. UGFCC - The General Secretary's Report, - 1964-65 - Acra, Jupiter Press - p 63.

137. Seidman, A.W. - "Ghana's Development Experience" - E.A.P.H. - Nairobi - 1978 - p 156.

138. Ibid - p 157.

139. Gunnarsson, Christer - "The Gold Coast Cocoa Industry - 1900-1939" - (Production, Prices and Structural Change).

140. See Gunnarsson, Ibid, and Polly Hill - "The Migrant Cocoa Farmers in Southern Ghana" - (A study of rural capitalism)

141. See Gunnarsson and Polly Hill - Ibid.

142. See Polly Hill - Studies in Rural Capitalism in West Africa.

143. Gunnarsson, Christer - op.cit. - p 43.

PART III - PUBLIC OWNERSHIP

Chapter 5

THE MINISTRY OF AGRICULTURE

5.1 Introduction

In this chapter the Ministry of Agriculture and its Research Stations are regarded as a separate organisation which services are linked between the central government and the peasant producers. The Ministry owns a reasonable amount of land throughout the country in the public interest for both research and reservation purposes. It is therefore, not unusual to classify the Ministry among other groups of landowners. Even so, the Ministry's close relations with the producers in its advisory capacity is more important than as a mere landholder. In this context, our analysis of the Ministry's role is essentially upon its close relations with the farmers towards improvements of cultivation methods.

We assume that the early post-war II period was the beginning of new transition of the economy of the country. The first decade (1945-55) of the transition marked the major changes in the agricultural policies and new methods of farming. Before that period, the Ministry merely persuaded the peasants to grow more food irrespective of whatever methods they employed. The Ministry's main task was to encourage the farmers to adopt scientific methods of farming. In this chapter we shall examine the changes in the Ministry's policies and the impact of the changes on land ownership.

5.2 The impact of the War

The period was one of transition largely because of the numerous problems and difficulties that were associated with new agricultural policies and changes in production methods. The first obstacle to the new policy was the impact of the war. The Great Powers had suffered heavy losses as the result of the war and it was during that early period of the transition that they were planning for recovery and re-arming themselves. Alghough Ghana was not directly involved in the European losses, it seemed very difficult for her to receive any technical assistance or capital investment to supplement its

development programmes. The following quotation from the Imperial Government sources gives an impression of the situation:

> "The Gold Coast farmers in general are men of high intelligence and progressive outlook. It is satisfactory to note that most of the chiefs are prepared to try out any reasonable proposals for the advancement of Agriculture. Their desire for progress far exceeds that which can be catered for by the Department of Agriculture with its lack of staff and experimental stations. The progressive attitude of the Chiefs and people is gratifying in that it holds out great hopes for the future, but embarassing in that we are, as yet, not in the position to put at their disposal the facilities required for progress."[1]

The above quotation shows that Ghana had to work out its own plans and find the possible means to solve the problems. It was the attempts at the solution of the problems that made the period a transition. A serious problem was the increasing threats of outbreak of swollen shoot disease of cocoa. The disease had rendered a large portion of cocoa areas in the Eastern Region devastated zones and indications were that the farmers were giving up cocoa cultivation in the areas. The Ministry appealed to the farmers to replant the devastated cocoa farms but the response to the appeal was poor. At first, it was believed that the swollen shoot disease was present only in the Eastern Region, but later, reports from Ashanti Region stated that there were chains of outbreak in the north-western part of the region. The information confirmed the impressions about the disease, that it could spread very fast.

As a measure to combat the disease, the Department of Agriculture put up 10-year survey plan by which the disease could be controlled. Accordingly, the whole cocoa growing areas in the country was classified and surveys conducted in three categories, thus:

1. Cocoa areas where swollen shoot disease was known to be present.
2. All other cocoa areas.
3. Potential cocoa areas.

Most of the cocoa areas had been devastated as a result of the swollen shoot disease. The farmers were disinterested in cultivation of cocoa and were turning the cocoa areas into food farming. They were doing so because the cocoa price had fallen considerably during the war and the government's "grow more food" campaign at that time attracted the farmers' attention to food-crop farming. The government offered incentives for food production and granted minimum guaranteed prices for grains to encourage the farmers to produce more. Food production was, then a more profitable undertaking than cocoa cultivation and there was no point for the farmers to turn back

to producing cocoa which was being threatened by swollen shoot disease. The Department of Agriculture had to make a strong policy about the revival of the cocoa industry. It was through the strenous efforts of the Department and the incentives granted to farmers that the cocoa industry was fully revived after the war.

While efforts were being made to restore the cocoa industry in the South, the Department's campaign for food production was extended to the Northern Region. The problems involved in the development of food production in the North were much greater than in the South. The Department had to embark upon soil conservation programmes, sinking of wells and building of water-dams for both human and cattle consumption.

Another important aspect of the Ministry of Agriculture's major policy during the early part of the transitional period was its claim for receiving several missions to Ghana. The objectives of the missions included the investigations of the possibilities of controlling crop diseases and pests and to find solutions to the problems which hindered large-scale farming on a scientific basis.

It appeared that all the missions sent from Colonial Office in London to visit West Africa after the Second War arrived in Ghana. They were the West African Oil Seeds Mission's Scheme for mechanised production of groundnuts and the West African Rice Mission which came to Ghana in 1948 with proposals for heavy capital expenditure. A large quantity of power-driven rice huller machines were made available by firms and sold to individual and co-operative rice producers.[2]

The Ministry of Agriculture's early post-war II policy towards scientific farming included land improvement like the introduction of artificial fertilizers to farmers, control of diseases and pests of crops and livestock; introduction of an improved variety of crops, mechanised farming and the use of good implements and tools. It also encouraged produce marketing through large organisations and co-operatives. The creation of Cocoa Marketing Board in 1947 and the Gold Coast Agricultural Produce Marketing Board in 1949 to take over the marketing of crops other than cocoa were important features of the Ministry's policies.

5.3 Staffing and Re-Organisation of the Department

The first problem associated with the implementation of the new policy was the Staff position. It was during the 1946-7 period when work on the proposed programmes started but the staff position as it stood at that time was inadequate for any long term development and worse of all, African trained technical staff were either very few or non-existent in certain fields. The services of the qualified expatriate officers were in most cases on contract basis and their replacement by African trained technicians was necessary if the proposed long term projects were to be successful. Consequently, several of the African junior officers in the Department were selected for degree courses in Agriculture in the United Kingdom during 1947-8 period. Just about the same period the country's political struggle for self government began and it was realised that when independence was granted most of the expatriate officers would be retired and therefore there was still a need for more African technicians to be trained to fill the vacancies. More of the serving Africans with long experience were promoted to senior grades and others were selected for further courses in various branches of Agriculture both locally and abroad.

In 1948, it was necessary to re-organise the Department of Agriculture into three main Divisions, each with specialised functions but all the three divisions headed by one Director of Agriculture. The new divisions were:

1. Division 'A' - Agriculture.
2. Division 'B' - Cocoa Disease Control and Rehabilitation.
3. Division 'C' - Produce Inspection and Grading.

Each of the divisions was headed by an Assistant Director of Agriculture. The Division 'B' and 'C' were separated from Division 'A' for practical reasons of concentration of adequate staff, funds and close relations with cocoa farmers.

5.4 Division 'A' - Agriculture

Up to the end of the Second World War, all aspects of Agriculture in the country were the responsibility of only one government organ, the Department of Agriculture. By the post-war agricultural policy three Divisions of Agriculture were established. The Division 'A' was charged with the sole responsibilities of all crops (except cocoa), livestock, the research work on the two including the extension services to farmers. Just about the time the war was going to end, the Agricultural policy was to introduce the idea

of Unit Farms to demonstrate to the farmers a system of farming which differed entirely from the traditional method of shifting cultivation and bush fallowing. "The Unit Farm System aimed at combining the growing of food and cash crops with the keeping of small livestock such as sheep, pigs, and poultry and by using green manures and compost of dung and waste vegetable matter to maintain the fertility of the soil to an extent which would obviate the need for moving to fresh land; this involved the use of rotations and manures.[3] The system could be called, "mixed farming". A farmer would require about 6-12 acres of land area if he were to practice mixed farming. A well-planned mixed farming in Ghana would form a unit holding comprising of a farm village with separate sheds for livestock, bush areas for firewood collection, permanent grazing fields, fodder crops, and a plot near a dam, stream or pond for growing vegetables.[4]

The Unit Farm System seemed to have been designed solely to suit the forest and savannah areas of Southern Ghana and Ashanti. Hence the post-war policy sought to revive the Unit Farm System and extend it to the Northern Region. The revival programme included the improvement in the use of farm tools. The success of the Division 'A' in the new agricultural policy, was its achievement in reshaping and introducing the system of mixed-farming to the peasant farmers. The Department brought in many exotic breeds of crops and livestock. The Pokoasi Agricultural Station which was established in 1942 purposely on a self-sufficiency basis to supply pork and bacon to the army and later to serve the civilians, managed to introduce to the farmers in that area, improved methods of pig breeding through its extension services.

In the Northern Region, the farmers showed a keen interest in mixed farming and the use of hand hoes was either completely displaced or supplemented, at least, by the use of bullock-drawn-ploughs. It was a step towards a change-over to a mechanised system of farming. During the 1947-1948 crop season, the farmers in the Northern Region were reported to have used bullock ploughs, most of which were bought from the Native Authority Loan Schemes in the districts. (See Table 12.)

5.5 Cocoa Disease Control and Rehabilitation Division

The government's post-war agricultural policy including that of entrusting all matters affecting cocoa to a separate organisation was implemented by creating the Cocoa Disease and Rehabilitation Division. Since the introduc-

tion of cocoa, its production has virtually become an industry of vital importance to the country. During the pre-war period, the entire organisation and management of the cocoa industry were the main functions of the Department of Agriculture but other major responsibilities of the Department did not allow it to embark upon full specialisation in terms of a keen research into agronomical and other problems under local conditions. For example, Ghana in common with other British cocoa growing countries and English manufacturers, jointly contributed towards the cocoa Research Scheme of the Imperial College of Tropical Agriculture in Trinidad from where research results and suggestions for improvement of the cultivation of the crop was obtained. In a special report to the Governor, Shephard, who was a director of the Imperial College of Tropical Agriculture in Trinidad suggested that, the industry in Ghana was so important and the local problems connected with it so numerous that a special experimental station was urgently required.[5] The need for research stations was recognised by the Department of Agriculture and the government but action had had to be postponed, first for financial reasons and secondly, because of the outbreak of the second world war in 1939. At the end of the war the Department of Agriculture was still convinced that "the most profitable modifications of existing methods of cultivation could be determined only by comprehensive and carefully planned experiments in typical cocoa growing areas".[6] The precise information required could not be known with certainty merely by reference to the experience of other countries. The best way was to create a separate Division charged with the sole responsibility of cocoa affairs and to entrust all technical and administrative matters of cocoa production to the Division. Hence, was the creation of Cocoa Disease and Rehabilitation Division as a separate entity with full autonomy during 1946-7 period.

The first task of the new Division was to re-organise the whole set-up of both technical and administrative aspect of cocoa production and to see to it that good measures were taken immediately to check the declining in yield per acre of cocoa. In that connection, the control of cocoa diseases and pests formed a major part of the Division's programme of work. The Cocoa Division managed to establish several experimental stations in all the main cocoa districts; recruited adequate staff for training and conducted intensive surveys to demarcate the swollen shoot disease areas.

Research proved that the swollen shoot disease was caused by mealybug vector

and by using a systematic insecticides the insect could be controlled from harming the cocoa plants. A liquid insecticide, known as "Hanane (CR 409)";[7] as believed to be capable of killing the mealybug and prevent re-infestation if a reasonable quantity of the liquid was applied around the base of the cocoa tree and gradually absorbed by its roots system. The news of these findings aroused great interest but it was later learnt that the insecticide was too poisonous to the person who applied it as well as to all other plants and crops in the close vicinity of the area of application. It was felt that the farmers, most of whom were illiterates would not be able to take extra safety precautions in handling the insecticide when it was recommended to them for use. The idea was abandoned altogether.

5.6 Conclusion

The first decade after the Second World War was a period during which the government adopted new policies by which agricultural production in the country could be increased. The implementation of the Government's policies was entrusted to the Department of Agriculture. For effective execution of the responsibilities, the Department had to re-organise itself to ensure specialisation of functions in order to cater for the needs and demands of the peasant producers. The first problem of the re-organisation was inadequacy of qualified technical staff to put the various programmes into operation. However with the help of the existing expatriate staff the problem was partially solved.

It was the first time that the Department of Agriculture became heavily involved in a programme which sought to introduce modern methods of farming to the peasant producers. Mixed farming in which there was intensive use of artificial fertilizers or farm yard manure and the use of farm machinery characterised the new agricultural policy. The impact of the new policy was more significant in the Northern Region in the sense of adoption of the new cultivation methods than in the Southern part of the country. Because of sparse population and large extent of land available in the North, the system of land ownership (*Tindana*) has always been free from litigation. The new cultivation methods which demanded large areas of land could be practiced easily without much hindrances of titles to land. In the Southern Regions the population density imposed a limit to sizes of farms in a way of litigations whenever a landowner attempted to expand his farms. The alternative was for the producers in the South to concentrate more on cocoa

cultivation by means of employment of traditional methods of farming on the existing small farms. In short it was due to cocoa cultivation and the system of land ownership that the new methods of farming which were introduced by the Department of Agriculture did not succeed.

References

1. As quoted by La Anyane, S. - "The Ghana Agriculture" - p 155.
2. See Ibid.
3. Ibid - p 93.
4. A lecture delivered by E. Botei-Doku, Principal, Agricultural Training Centre, Kwadaso/Kumasi - when the Author was a 3rd year student.
5. See Shephard, C.Y. - "Report on the Economics of Peasant Agriculture in the Gold Coast - p 8.
6. During the pre-war period experiments were carried out at Kumasi; Aburi; Asuansi and Kpeve Agricultural Stations but more stations were needed for comprehensive investigations solely for cocoa problems because the existing stations were not located in the principal cocoa producing areas.
7. The insecticide was named after Dr. Hanane, a specialist in Plant Pest Control at W.A.C.R.I. - Tafo.

Chapter 6

AGRICULTURAL CORPORATIONS AND STATUTORY BOARDS

6.1 Introduction

We stated in Chapter 5 that during the war period the agricultural policy was the encouragement of the farmers to grow more food to meet the demands of the war and that they showed keen interest in the "grow more food" campaign which was launched. The campaign was successful not only because of the government's minimum guarantee prices paid to producers but also because the threat of swollen shoot disease had discouraged the farmers to continue to produce cocoa. At the end of the war, when the government decided to revive the cocoa industry, it had to offer extra incentives in order to attract more farmers into the cocoa industry to increase production. Once again, the government succeeded so much in winning the confidence of the cocoa farmers, that by 1950, nearly all farm activities were centred on cocoa production. Consequently the production of foodstuffs declined in all regions. Reports of shortages of essential local food items and their relative high prices indicated that the food supply situation was impaired. In 1949, the government appointed a sub-committee from the then Central Planning Committee, on food production. The sub-committee's report called for urgent need for:

(i) increased production of foodstuffs for local consumption.

(ii) improved communications between producing areas and consuming areas.

(iii) the bulk purchase of surplus semi-perishable foodstuffs at a guarantee prices.

(iv) the storage of the foodstuffs purchased and their distribution when required [...][1]

The Sub-committee stressed in its report that the government's action on item (ii) above was to be given priority by immediate formation of an organisation under the control of two administrative officers, one in Ashanti and the other in the Southern regions. Northern Region was not considered, but perhaps, it was because the bulk to be stocked in the South and Ashanti regions would be sufficient for supplies in the North as well. The Sub-Committee recommended that to implement the programme it was necessary for storage depots to be opened at convenient centres throughout the two regions.

The government accepted the recommendations of the Sub-Committee and a Bulk Purchase Scheme was put into operation in November, 1949. There was a delay in making provisions for the guaranteed prices and so did not come on until about June, 1950. The organisation of the Bulk Purchase Scheme was somewhat impressive at its early period of inception but later it failed because of the introduction of brokers who bought the food items like maize, rice, groundnuts and cowpeas on a competitive market basis. In April, 1951, the activities of the Scheme was transferred from the Director of Commerce and Industry to the Ministry of Finance. Even after the transfer the food shortage problem was not solved and in March, 1952 the government set up a Food Production Committee to consider the problem of increasing food production and improving the distribution of foodstuffs for consumption and to make recommendations as to the terms of reference, powers and functions of a Food Production Board.[2]

6.2 Agricultural Development Corporation

The Agricultural Development Corporation (ADC) was established in 1955 to take up the functions of the Agricultural Produce Marketing set up in 1949 and the Agricultural and Fisheries Development Corporation Limited established in 1948. The main functions of the Agricultural Corporation was to market all export crops other than cocoa, and of foodstuffs locally. To ensure that the country would not face any food shortage problems the ADC organised a number of production projects and granted short-term loans to non-cocoa farmers.

Apart from granting of the loans, the ADC planned a number of projects on estate and plantation basis.[3] All the Schemes, except the cocoa and coffee estates, were operated but they were not successful. The estimated cost of the projects was about £ 2 million. The establishment of estate and plantation systems of Agriculture had always been a failure. In 1953-54 the Agricultural and Fisheries Development Corporation established a large pine-apple estate but it was a mere waste of government funds. Another type of estate Agriculture was the Gonja Mechanised Farming Scheme at Damongo which was also a complete failure. We might be inclined to conclude that Ghana conditions had not been conducive to large-scale plantation type of Agriculture.

6.3 Gonja Development Corporation

One of the large Agricultural projects which was established as a means for improving the local food crop production was the Gonja Development Company. It was established in 1950 as a limited liability Company, "with the nominal capital of one million pounds, divided into 50,000 'A' shares and 950,000 'B' shares, which did not carry any voting rights. Of the 'A' shares, 7 were allocated to the signatories of the Memorandum and Articles, 26,000 were allotted to the Corporation (which thus became the majority holder of shares in the 'A' class), and 23,993 to Government. The whole of the 'B' shares were also held by Government".[4]

The establishment of the company was the result of the recommendations of the West African Oilseeds Mission which toured Ghana in 1948. The Mission had previously recommended similar gigantic agricultural projects in other parts of West Africa. With the Gonja Development Scheme the government planned to establish two separate large pilot schemes for mechanised cultivation of rice, groundnuts, millet, maize and other crops. The first pilot scheme was sited at Damongo in the Northern Region; and the second at Amantin in Northern Ashanti. The scheme was headed by a Managing Director, an expatriate who was qualified to be the Project Manager for the Scheme at Damongo. The following were the company's policy and objectives:

"(a) To clear virgin savannah country for agricultural purposes;

(b) to introduce mechanized methods of agriculture;

(c) to operate a balanced general farming economy suitable for the settlement of African farmers;

(d) to produce food supplies surplus to the requirements of the Northern Territories (Northern Ghana) and to export such surplus to the South;

(e) to establish village settlements accomodating, in tribal groups, settlers from the more densely populated areas of the Northern Districts."[5]

On the basis of the vegetation and soil conditions of the areas selected for the Scheme, the company aimed at achieving increased food production by combining the introduction of mechanised Agriculture with the use of improved seeds and fertilizers. The first signs of the failure of the company showed with the type of farm machinery and implements imported from overseas. They proved unsuitable to the local conditions at the first attempt at cultivation. The trial crops[6] also gave very poor results in yield. Tobacco was the only crop whose yield showed promise. By 1953, about

3,800 acres of arable land had been cleared and brought under cultivation amidst the problems of constant breakages of machinery or implements and resulting in poor performances of crops. When farm machinery broke in the field a new one of the same type was ordered while the damaged implements were discarded.

About 40 Europeans were employed as farm managers each of them placed in-charge of a separate production unit. They were assisted by about 15 junior officers with the average labour strength of 1,300 a year. "The company's Senior Staff were not efficient Agriculturalists, and a complete mess was made of the farming operations and actual cultivation."[7]

At a later period, the company realized that they were running at loss and decided to deviate from the farming project to take up extra contracts so as to neutralize the excessive costs already incurred. The company took up a contract to construct a trunk road from Kintampo to Busunu with the view of shortening and improving the route from Kumasi to Damongo. Again, it took up another contract of soil conservation works (in now the Upper Region) on behalf of Northern Ghana Land Planning Committee. Even with those contracts the company was still running at a loss and so the Ghana Government was compelled to liquidate it in 1956.

6.4 Agricultural Produce Marketing Boards

The pre-war conditions of marketing of Agricultural produce in Ghana was through merchants or Agents of overseas manufacturers and co-operative societies. All these organisations were more interested in the marketing of cocoa than other agricultural export produce.

When the war broke out in 1939, all marketing activities slowed down, and the marketing organisations were terminated completely owing to the fears of high risks in the shipment and resale of the produce abroad. "To ensure the continuity of cocoa industry during the war time, the United Kingdom government offered in November of that year, the assured purchase of the whole of Ghana cocoa crop, irrespective of the loss it might make on re-sale."[8] Following this policy, the 1939-40 crop was purchased solely by the United Kingdom Ministry of Food. All of the purchases of that season could not be utilised in Britain and therefore the U.K. government decided that it was necessary to establish a marketing organisation to handle and dis-

pose of the surplus. For the first time, the West African Cocoa Control Board was called upon to market cocoa. Since that time, the government's agricultural policy came to be that the marketing of important export cash crops should be the sole responsibility of a marketing board.

The West African Cocoa Control Board which took over the marketing of cocoa in 1940-1 handed over the responsibility of cocoa marketing to West African Produce Control Board in May, 1942. The change came as a result of the government's new policy that the duties of a marketing board should be extended to the marketing of other agricultural export crops such as palm oil and oil seeds to meet the war time urgent demands. With the new policy the Secretary of State for the Colonies became the overall authority for purchase, resale, or disposal of cocoa and the oil products.

The West African Produce Control Board succeeded in its war-time operations as the sole marketing organisation for Agricultural Export Produce. However, towards the end of the war it was discussed in certain official circles that the organisation should be replaced at the end of the war by a newly formed organisation which could keep prices stable over the crop season so as to avoid short-term price fluctuations.[9] After the war, a Cocoa Marketing Board was established in 1947 to commence operation at the beginning of the 1947-8 crop season. The main functions of the Board was to purchase the entire cocoa crop, to fix prices that were to be paid to farmers at various buying centres and to take up the sole responsibility for the export of the crop. According to the ordinance which established the Board, "It shall be the duty of the Board to secure the most favourable arrangements for the purchase, grading, export and selling of Gold Coast cocoa, and to assist in the development by all possible means of the cocoa industry of the Gold Coast for the benefit and prosperity of the producers."[10]

As from September, 1947, the CMB took over all the marketing responsibilities of the West African Produce Control Board. It included the savings of £ 13 1/2 million with which the CMB was to start the operation. The CMB opened its subsidiary branch, in London and it was registered in the United Kingdom as, "the Gold Coast Cocoa Marketing Company". The company was to look after the interests of the Ghana crop on the overseas markets on behalf of the Cocoa Marketing Board.

When the Cocoa Marketing Board was set up in 1947, the primary aim was to

undertake the marketing and export of all agricultural produce to conform to the functions of the West African Cocoa Control Board from which the CMB took over. Before the inception of the CMB it was decided that the Board should specialise in the marketing of only cocoa and that the marketing functions of other agricultural produce should be handed over to a new organisation whose functions could be extended to include a wider range of agricultural produce throughout the country. As a result of the decision, the Agricultural Produce Marketing Board was established in 1949. The new Board was to be responsible for the purchase and export of coffee, palm kernels, copra, and shea nuts. Later on, the Board was annexed to the Agricultural Development Corporation and it took up the purchasing and exporting of bananas as well.

The Agricultural Produce Marketing Board succeeded in its operations especially in the marketing of coffee. It was able to check the farmers to refrain from the previous tendencies of smuggling bulk of coffee across the borders to the French territories by offering them higher prices. However, at any time that Ghana prices fell relatively to those of the French territories the smuggling problem arose again. In 1950 the price of coffee was better but still the crop was smuggled across the borders to the French territories where the prices were higher.

In 1952, the ordinance which established the Board was revised. Accordingly, the Board was to purchase all agricultural produce through Licenced Buying Agents. The Buying Agents were made responsible for direct purchases of all agricultural produce at ex-sale price at the buying stations. Again, the Board depended upon the services of the Buying Agents from the time of purchase of the produce to the time of shipment at the port. In 1952, the marketing of groundnuts was added to the functions of the Board but did not give good results on the export level as did the palm kernels, copra, and coffee. The Agricultural Produce Marketing Board lasted only up to 1954. The trade report for that year showed a net surplus of £ 82,525 and 15s, due largely to trade in palm Kernels and coffee.[11]

6.5 Conclusion

The setting-up of the large-scale state producing units was another aspect of the Government's post-war policies. This means that apart from the cocoa industry which was a complete sector of its own, there were two broad pro-

grammes for agricultural development. The first was the one by which the peasant farmers were being encouraged to adopt scientific methods of cultivation on a larger scale than they had previously been practising on traditional farms. The second, was the gigantic mechanised farm units. The success of all the sectors depended upon the efficient management and direction of the Department of Agriculture. Even with the large corporations it was the Department which recruited the technical personnel responsible for the various production units. Perhaps there was no need at the time for the government to establish these large organisations since there were not enough qualified staff in the Department of Agriculture with which the whole policy programmes were entrusted. There was no need even for the creation of the several marketing boards at such an early stage of the development. The boards were created at the time when peasant farmers had not yet adopted the new methods of cultivation neither had the large-scale mechanised corporations succeeded in their targets of increased production. The Cocoa Marketing Board whose establishment was necessary should have been made to retain its dual responsibilities of marketing the cocoa as well as the other agricultural produce as initially planned.

There seemed to be divided attention in direction and supervision of the Department's few qualified personnel among the various sectors. In effect, the peasants were not given any substantial practical push towards the scientific approaches of cultivation and as a result they had to fall back to the old methods which were less expensive and less complicated. They could cope well with the old methods in cocoa cultivation; hence the great enthusiasm they showed during the launching of the swollen shoot campaign in the same period. There were slight indications of success of the mixed farming in the Northern Savannah areas of the country because the "pull-effect" of cocoa was not there.

As we have already stated, the establishment of the several produce marketing boards was not necessary, at least, at the crucial period of the economy when there was practically no surplus produce, apart from cocoa, to be marketed. The huge sum of money voted for the Boards could have been used to supplement the mixed farming programme of the peasants.

References

1. La Anyane, S. - "Ghana,Agriculture" - p 166.
2. Ibid - pp 167-168.
3. La Anyane, S. - Ibid - lists them as follows: pineapples; oil palm; cocoa; coffee and mixed farming. Other plans were for poultry scheme; fisheries scheme; boat-yards scheme and boat hire; tobacco scheme; Agricultural Machinery hire purchase; scheme for groundnuts and animal husbandry; and the Gonja Development corporation.
4. Ibid - p 169.
5. Ibid - p 170.
6. These were Hegary, a dwarf sorghum from Texas; plainsman sorghum; a type of dwarf sorghum from the former Belgian Congo; and other imported cereals - rice, maize, millet, groundnuts and tobacco.
7. Ibid - p 171.
8. Ibid - p 173.
9. The Nowell Commission in 1938 had found the pre-war organisation of the marketing systems inefficient and the war time experiences also confirmed the need for price stability policy.
10. The C.M.B. Ordinance No. 16 of 1947.
11. La Anyane, S. - op.cit. - p 178.

Chapter 7

NATURAL RESOURCE OWNERSHIP

7.1 Introduction

The discussions in this chapter are devoted to the restrictions by law of the inhabitants' interference with reserved lands and other resources of which sole ownership is vested in the Government on behalf of the nation as a whole. Under certain conditions, however, property rights of use of the resources may be granted on a temporary basis. We shall examine the conditions under which a person or group of persons may have ownership rights of the resources in the reserved lands and try to find out how such rights have historically and economically been made use of.

Owing to the growth of population and increasing farm and industrial activities on the land it became necessary to place a limit on human interference with certain parts of the vegetational zones by law. The restriction was necessary in view of the rate at which forest lands were being cleared for cocoa cultivation. For example, in the 1946-47 annual report of the Forestry Division the area of unbroken and unreserved closed forest was estimated at 11,000 square miles; in that same report for 1957 the area was estimated to be 4,760 square miles. According to a cocoa survey of the Division of Agriculture, there was an expansion of cultivation in the ten years of the order of 600 square miles per annum.[1] Again, urbanisation as a result of industrialisation, particularly the mining also contributed to the rate of forest depletion. In the savannah woodland and grassland areas too, the natural vegetation was destroyed by burning the grass during dry seasons purposely for hunting or encouraging new growth of perenial grasses and other succulent shrubs for grazing of livestock. Until recent times, Ghana was comparatively a country of high forest vegetation in the South and thick savannah woodland in the North as well as along the coastal areas. Cocoa thrives best in the rain forest areas and since the cultivation of the crop was intensified during the post-war period a greater part of the unreserved forest was claimed for agricultural purposes.

"Out of the total area of 31,760 square miles originally under high forest, it was estimated in 1957 that about 10,610 square miles remained as high

forest. Of this latter area 5,850 square miles or 19.4 per cent are forest reserves which constitute the permanent forest estate, and which will remain as high forest. The other 4,760 square miles still under forest, most of which is on the western side of the zone, is likely to be denuded of its forest by the activities of farmers. [...]"[2]

7.2 Forest Resources

The traditional farming in Ghana was forest fallow system which required not only a large area of land but also many years of fallow period after cultivation. With the population increase, the limitations of the forest fallow system became apparent in the uneconomic use of land and also in the decreasing quality of soil fertility. The high forest lands had one other great advantage that of maintaining the local climate in a suitable condition, especially with regard to the humidity required for growing the local crops. Before a system of good husbandry employing much shorter fallow cropping could be successfully adopted it would be necessary to find a means to preserve the natural forest and at the same time protect the leaching out of the soil nutrients. For both protective and productive purposes certain areas had to be set aside, and the forests contained in them could no longer be considered by the inhabitants as part of the fallow in the general agricultural system.

For the first time, the colonial government established the Forestry Division (then a Department) in 1909 but little progress towards forest reservation was then possible owing to the strong opposition to any interference with land rights. The Forestry Division was closed down during the First World War because of the difficulties it encountered in reaching the objectives for which it was established. The Division was re-opened in 1919 and by 1926 a great deal of surveys and extensive propaganda had been carried out for the voluntary reservation of forest areas by the stools and native authorities . Although not many areas were brought under voluntary reservation, it appeared that the opposition to the reservation policy was gradually dying out and so the first Forests Ordinance was enacted in 1927.[3] The Ordinance empowered the colonial government to enforce forest reservation. The principal clause of the Ordinance which was only slightly amended in course of the subsequent years reads as follows:

> "Subject as provided in section 34, it shall be lawful for the Governor to constitute as a Forest Reserve in any of the following lands, namely:

(1) Lands which are the property of the government;

(2) Tribal or Stool lands, at the request of the native authority;

(3) Private lands at the request of the owner;

(4) Lands in respect of which the Governor-in-Concil is, on the advice of the Chief Conservator of Forests satisfied that the forests thereon ought in the public interest to be protected from injury or destruction, as the case may be, or that forest growth should be established thereon, in order:

(a) to safeguard the water supply of the district; or

(b) to assist the well-being of the forest and agricultural crops grown on the said lands or in the vicinity thereof; or

(c) to secure the supply of forest produce to the inhabitants of villages situated on the said lands or in the vicinity thereof

(substituted by 31 of 1928, S. 2 and amended by 21 of 1949)"[4]

This mandate caused the Forestry Division to make a steady progress in those forest areas where deforestation would cause harm. Later on, the Forestry Division extended its work to the Northern Region where the areas of savannah woodlands were brought under reservation.

There were two types of ownership rights for basic raw material (timber, etc.) in the first place, of private or communal ownership in unreserved areas; (high forest would occur mainly in the area where the customs of the Akan group of tribes prevailed) and in the second place, in the state ownership of the reserved forest area. In the former case, "an operator wishing to cut and extract timber must first purchase the right to do this from the local 'stool', generally by payment of consideration money and an agreement to pay a fixed royalty for every tree, varying with species, but irrespective of whether the tree is large or small".[5] In the latter case, when a forest or savannah woodland was claimed under the Forest Act, the area became the property of the government and therefore free from all customary tenurial systems. No person would be allowed to enter the area for the purpose of farming, felling a tree or even brushing down any part of the undergrowth. Under the Act, all economic trees in both reserved and unreserved areas remained the property of the government. In practice, however, the government might release part or whole of a forest reserve area or even only few of the economic trees in the area to prospective operators. Such acquisitions of land for use of forest products, etc. would be usually granted under the Concessions Ordinance, Section 13 (8) that, "no Concession shall be certified as valid if it grants or purports to grant rights to remove natives from their habitation within the area of such Concession.

Therefore a Concession which is validated by the court cannot result in the eviction of persons in occupation of the land prior to the grant of the Concession and the beginning of operations".[6] The greater part of timber rights acquired had been through concessions but for areas where the work of extracting the timber would only last a year or two many operators, both Ghanaians and expatriates, would prefer to take the chance of entering into a simple felling agreement with the owners (which might be contested in the local courts under the native customary law but which would be invalid in any of the higher courts), rather than to go through the rather involved and expensive process of registering and later valideting it as a concession.[7] An operator would be allowed to have rights of use to the reserved area or the resources therein under one of the following agreements:

(i) Lease[8]

Application for a lease of land concession for extracting timber, etc. would be considered if such actions would not undermine but promote the social and economic welfare of the inhabitants of the area and/or the state as a whole. A lease would imply a long-term agreement between the operator and the government. A lease might last between 25-99 years depending upon the nature of the project. A small fee would be paid annually to the government as an honour to the terms of the agreement and a breach of payment for a long time might be tantanmount to cancellation of the agreement otherwise it would serve as a guarantee from undue interference in the area of operation. If the area covered more than three square miles and the period of operation was more than three years, the lease agreement would be considered as a land Concession; in that case, "it must be registered and later validated in the local high court if it is to retain its legal validity for more than two months".[9]

The Concession Ordinance empowered the Chief Conservator of Forests to use his discretion for direction and restriction in both reserved and unreserved areas where concession agreement for timber extraction existed. In the reserved areas concessionaires could be expelled to work under a somewhat, "strict scheme of management embodied in a working plan ensuring a sustained yields";[10] whereas in the unreserved areas the concessionnaire could fully be controlled only in terms of felling of marketable timber (e.g. restrictions on age, girth and specie of trees) but not necessarily on

destruction of other forest trees and bushes because of threatening current or future agricultural activities of the area.

In the Forest Reserve the staff of the Forestry Division would assist in the scheme of management by carrying out periodical stock surveys of trees to be exploited to determine the number of location of all matured and over-matured trees and to select those due for felling. The concessionnaire would be supplied with the details of the surveys and he could then proceed with the felling and extraction of required timber trees. This method of survey became a routine management and even in the unreserved areas the large companies adopted similar techniques to ensure the number of trees available in their concession several months prior to operation. The small firms usually employed local tree-finders (tree spotters) on a small commission basis to select trees and later lead felling gangs and track cutters to the spot.

(ii) Licence[8]

A person or group of persons could be granted a licence to operate in a specific area within a forest reserve for a period of not more than three years unless otherwise renewed. Licence for exploitation of timber could be granted only when the area of operation would not exceed 3 square miles.

(iii) Permit

Where a person wanted to fell a specific quantity and species of timber trees after which he would no longer operate in the reserve, he would apply for a permit to do so. In that case, the type of timber species and their locations in the reserve would be stated in the application forms with details of quantities of each specie mentioned. An officer from the Forestry Division within whose supervision area was the reserve would be appointed to inspect and certify that the information contained in the application was in order before the permit would be granted. Once a permit was granted, there would be no time limit but the applicant must complete his operation within a reasonable period otherwise the trees would be handed over to a more active person.

Again, the local inhabitants might sometimes be granted permission

to clear limited acreages of land within forest reserves for agricultural purposes.

One of the post-war II amendments in the Forest Ordinance was that, "all persons and firms felling timber for export or for sale to a sawmill must also have applied for and have registered a property mark with the Chief Conservator of Forests. To obtain this they must show that they possess or have obtained rights to fell the timber, have the means to extract it and an agreement to sell".[11] This regulation was to prevent people from felling good timber on speculation on the chance of a later sale.

The forests and woodlands of Ghana had long been the main sources of supply for fuel (firewood) and timber. The firewood and charcoal were largely used for domestic purposes and sometimes for local industries such as distilling of gin, baking of bread, smithing works and curing of fish catches from the sea or tobacco, etc. Firewood was collected from the unreserved forest or bushes after clearing of farms and was bunched and conveyed home. Part of the collections were sometimes processed as charcoal in the bush before they were brought home from where they were easily transported in vehicles in large quantities to the urban centres. "Estimates of annual fuelwood consumption (1958) are 191.3 m solid cubic feet of firewood and 70.1 m solid cubic feet converted to charcoal, amounting to approximately 54 cubic feet per head of the population."[12]

Almost all local building materials such as poles or sticks, ropes and thatches for roofing including hardwoods for carving of traditional drums and handles of farm tools (e.g. hoes and axes) came from the forests and savannah woodlands.

The next economic advantage of Ghana's forests was their abundant supply of timber. It was officially stated in 1957 that, "out of about 190 economic species of forest trees only 20 species are so far being exploited and of these twenty, 6 species contribute 90 per cent of the volume" (of a total cut with export logs of 48.9 m cubic feet).[13] A greater part of the forest timber production was for export. "The annual amount exported at 24.8 m cubic feet in log form and 7.9 cubic feet of sawn timber (1957) far exceeds the 3.4 cubic feet of mill-sawn and pit-sawn timber consumed locally."[14]

By 1975 about 12 more lesser known species had been identified and found to be commercially viable but the timber importers in Europe were reluctant to buy the new species on the market. Below is a press release about the situation:

> "In Britain, Mr. Peter J. Moore, a director of Gould-Oliver Limited, a prominent timber company has said in a talk to members of Wood Forum at a meeting that 'sooner than later, more so-called secondary species would have to be accepted.' Many of these timbers, he said were already known on the U.K. market but it has just not been necessary to try and make use of them. Mr. Moore believed that it would be necessary to consider accepting groups of species, at least for certain purposes, marketed as one product. An instance of such grouping would be on the basis of species having similar strength and properties where colour was of little importance."[15]

In view of the importers' reluctance to accept any type of species that were exported the producers were advised to fell according to demand. The Executive Chairman of the Ghana Timber Marketing Board, addressing a meeting of the Exporters wing of the Ghana Timber Association at Takoradi said, "With the market situation being what it is at present Exporters have a special role to play in educating Producers to fell according to demand. As long as Exporters leave themselves open to accepting whatever logs are produced and brought down to Takoradi without log Inspection Sheets they aid and abet the current wanton destruction of our forests. We have been telling the Producers to fell according to demand. Your operations should support this policy."[16]

The timber trade in Ghana could be traced back from the Elizabethan times when square of ekki (kaku), *Lophira alata Banks ex Gaertn.* f., were shipped to form keels for the wooden ships of the day.[17] Although shipment of this specie[18] which had qualities of fine, hard and heavy timber fell because there was no demand for it, the trade was not curtailed but rather continued as new species were introduced on the market.

Despite its long history, the organisation of the timber trade was not planned but developed on its own on individual basis through private enterprises as demand grew. "The last complete year, 1945, for which Logan had records showed a gross export of 2,692,051 cubic feet."[19] Table 14 shows the export figures since then.

Table 14

Gross Export of Timber - 1945-1963

Timber Exports in Million Cubic Feet

Year		Year	
1945	2.7	1954	17.9
1946	4.3	1955	23.5
1947	5.7	1956	27.1
1948	7.1	1957	32.4
1949	7.5	1958	34.9
1950	10.4	1959	35.9
1951	9.9	1960	37.3
1952	10.6	1961	30.2
1953	15.2	1962	25.3
		1963	26.9

Source: A. Foggie and B. Piasecki - "Timber, Fuel and Minor Forest products." - In J.B. Wills (ed.) op.cit. - p 236. Also in Birmingham, W. (ed.) - "A Study of Contemporary Ghana" - Vol. 1 - op.cit. - p 233.

These were exports for which exact figures are available. There are no figures for internal consumption for sawn timber and we must rely on Logan's estimate that, "in 1946 approximately 2.5 m cubic feet of sawn timber were consumed internally. Again, according to the government statistician, the commercial sawmills produced and sold 2.4 m cubic feet plus another 1.01 m used by the mills themselves in 1957.[20]

A large number of pitsawyers who operated in groups of small gangs throughout the country also played an important role in the sawn-timber production. In the absence of any record the production figure was "estimated to be 625,000 cubic feet in 1957. This, together with the sawmills' local sales and use, totaled only 4,04 m cubic feet which, though a 61.6 per cent increase over 1946 consumption, was negligible compared with the five-fold increase in exports, and represents an astonishingly low per capita consumption".[21]

The timber trade was better organised during the post-independence period. The Ghana Timber Marketing Board was formed and charged with the responsibility for direction and supervision of the industry according to the government's objectives. Unlike the cocoa, "the timber trade in Ghana is open to all and sundry overseas timber dealers wishing to buy timber in Ghana have two channels open to them. They can buy direct on the spot from the various

producers after registering as agents or buying office in Ghana or conduct purchases through local exporters and resident timber export/agents operating in the country.[22]

The United Kingdom and Western Germany had for long time remained Ghana's main log timber importers, but in 1974, Russia imported more round logs from Ghana than all other importing countries. Of the 15,273.19 tons of round logs exported to 12 countries. Russia alone imported 5,433.3 tons, valued at ¢ 1,228,000. The total exports in October stood at ¢ 2,449,000.[23]

7.3 Mineral Resources

Ghana's role as one of the world's major suppliers of gold compelled the early European merchants to name the country, "Gold Coast". Gold formed a principal item of the internal trade among the inhabitants for several centuries even before the Portugese arrived in the late 15th century. If the trade connections between Europe and West Africa was more significant than other parts of Africa, it was partly due to the presence of this valuable mineral resource in Ghana. Other mineral deposits were not known and it was not until the early part of the 20th century that the discovery and exploitation of other mineral deposits began in the country. The manganese deposit, for instance was discovered in 1913 and its commercial development began in 1916. The first diamond deposits were discovered in 1919 and mining began in 1920.[24]

The post-war II changes in the country's economic strategy towards trade and commerce and other development projects brought with them a high demand for other resources like quartz sand, granite and marble stones; and quite recently clay was found to be of a great commercial value in the building and road construction sectors in the economy.

We shall examine the systems of ownership of mineral deposits in the country and try to find out the changes that have taken place since 1945. All the mineral deposits may be classified into two main groups as follows:

(a) Primary Minerals

These are the deposits which were already known or found to be of important commercial value either long before the arrival of the Europeans in the country or as late as 19th and early 20th centuries. Examples are gold, manganese, diamond, bauxite and

the like.

(b) Secondary Minerals

These are the large deposits of minerals which the inhabitants had little or no knowledge of the economic value until the actual trade and commerce in the modern sense began. Examples are clay, sand, gravel, granite stones and the like.[25]

These two main types of mineral deposits could be exploited under conditions of one of the two ownership systems, that is, according to the traditional customary law and lease concessions Act ownership rights. Historically, the former was gradually being replaced by the latter system. The ownership rights of all the mineral deposits were the same. Changes would take place when a particular mineral began to assume high economic importance. Our discussions would be devoted to the gold deposits only since the ownership rights would be the same with all other mineral deposits in the country.

The customary law governing the property rights of land excluded all valuable mineral deposits in the soil or river basins or even nuggets found in any part in the traditional area. A farmer could buy a piece of land for farming purposes but according to the customary law he would have no right of ownership of the mineral deposits or nuggets found in the farmland. The property rights of all mineral deposits in the land were vested in the traditional chief on behalf of the community. However, upon the chief's discretion individuals could be granted the rights to mine the ground or search into the rivers for minerals like gold or diamond on a share basis. A native miner would be granted 50% share of the proceeds of the minerals dug out and 50% share to the chief. A stranger would be granted 33% share. We learned that in the olden days, nuggets as big as a man's fist could sometimes be found while hoeing or digging in the farm. Even so, the founder had no right to claim ownership but to take them to the chief of the area for handsome rewards.

The presence of the secondary minerals in the country had, for a long time been in abundance. Because they were of less economic importance, the restrictions imposed by the customary laws of their exploitation were not seriously observed. Minerals like clay, sand and gravel, etc. could be exploited for household purposes without prior permission from the local chief. During the post-war II period, development took the form of building

of township and road construction which brought with them an increase in demand for these resources. Entrepreneurs began to acquire lands to exploit the mineral resources and their actions were reinforced by introduction of suitable equipment and heavy machinery[26] in the mining sector. With the huge capital investment and overhead costs in the mining sector, the customary laws could no longer cope with such land acquisition and had to give way to lease concession of ownership rights.

As we stated before, mining of minerals was a long term development which entailed heavy capital investment and overhead costs. The investment capital and other costs, of course, would vary according to the nature and quantity of the mineral deposits and the type of equipment and machinery employed. No enterpreneur would be prepared to take on such investment for him to be told after a year or two that he had no longer a right to exploit the resources. The unwritten customary laws were not sufficient to ensure security of long term development to attract the foreign investors into this sector of the economy. In view of the sophisticated machinery and equipment used, mining industry required technical know-how as well as a large size of man-power both of which no average Ghanaian could afford to provide. It was upon these considerations that the ownership rights of mineral deposits were governed under the lease concession Act and subsequently allowing the industry to be dominated by foreign private companies. By the end of the Second World War all the gold mining industries in the country were owned by foreign private companies.

In late 1960, the State Mining Corporation was formed and in early 1961, the Ghana Government acquired five of the Mining Companies. The functions of the newly formed State Mining Corporation were officially stated in the following terms:

> "The object of the Corporation is not to run the gold mines directly. It will be a holding company for all of the shares of the mines taken over and will direct overall policy. It will be subject to the general and specific direction of the government."[27]

Many observers regarded the government's participation in the mining companies as nationalisation and even if it were so, "it was the pressure exerted by costs on profit margins which led directly to the sale to the Government of the mines that are now owned by the State Mining Corporation. If the Government had any intentions of complete nationalisation it would

have included the Ashanti Gold Fields which was the richest in terms of gold deposits and which also enjoyed the highest profit margin. The profit margins of all the mines in the country dwindled because "in July 1960 the Government introduced minimum wage legislation which raised the daily rate for manual labourers in the mining areas from 5s. to 6s. 6d."[29] Following the Government's legislation, two Companies (the ABA and Bibiani) were compelled to close down because the wage increase, they felt, could not be matched by comparable increases in labour productivity. The argument appeared to be supported by the indices of the everage labour productivity, in terms of output of fine ounces of gold per man.[30]

From 1947 to 1959 increases in earnings and productivity were somewhat related, "showing no persistent divergence". Because any wage increase of the African labour force corresponded to its productivity during this period, it did not exert any significant pressure on the units costs of production. Even in the cases where unit costs of production rose slightly, they must have come from other causes. The crux of the problem happened during 1959-1961 period. "Average monthly earnings rose from £ G10. 15s. in December 1959 to £ G14. 10s. in December 1961, while in the same period labour productivity actually declined a little,"[31] and unit costs were raised. "The working costs of the Bibiani mine rose 179 per cent between 1947 and 1962; Amalgamated Banket Areas (ABA) and Ghana Main Reef rose about 150 per cent over the same period; Ariston by 118 per cent; Konongo by 86 per cent; and Ashanti Gold fields (Obuasi) by only 44 per cent."[32]

With the higher unit costs of production, the position of the five mines which were later taken up by the state worsened. In the mining industry as a whole, it was only the Ashanti Gold Fields and Konongo Mines which were able to increase labour productivity during the period 1959-61. The others, ABA, Ariston and Bibiani became completely paralysed by the increase in wages and suffered a heavy decline in productivity. "Faced with the threatened closure of at least two of the country's mines the Ghana Government made an offer to buy these and three others - an offer which was accepted."[33]

Upon acquisition, the Ghana Government became the sole ownership of the five gold mines and entrusted them to the State Mining Corporation which was to receive any profits and to bear any losses incurred on behalf of the government. The peak profits period was reached in 1958 and 1959, and the

decline started in 1960 before the state acquisition took place, continuing and accelerating through 1961 to 1962. Thereafter, the full impact of the wage increases made itself felt. Productivity and profitability in the mines fell considerably. At the end of 1962, only one (Bremang Dredging Company) out of the five were operating profitably.

Another important factor which contributed to the decline in production was the exhaustion of the ore reserves. The Mines inquiry report stated that:

> "In orders that mining operasions can be continuous, development is undertaken in order to determine the amount and value of the ore that can be mined. [...] Where undergound deposits are to be worked out it is not practicable to determine before hand the total amount of ore that is present; generally it is sufficient to have proved ore for 4 to 5 years of operations provided the geological evidence indicates that further amounts of payable ore can be developed, [...]
>
> The value of the ore that can be economically treated depends on the level of costs and any increase in costs may make it necessary to exclude some ore from reserves as unprofitable. [...]"[34]

Table 15

UNDERGROUND GOLD ORE RESERVES - NUMBER OF YEARS' RESERVE AT CURRENT MILLING: VOLUME - SELECTED YEARS

Mine	Years			
	1947	1953	1959	1962
1. Amal. Banket AReas	12.0	8.0	1.3	1.0
2. Ariston G. Mines	11.5	8.0	-	2.2
3. Bibiani	8.0	9.0	7.4	1.7
4. Ghana Main Reef	9.5	3.5	1.9	1.4
5. Ashanti. Gold Fields.	10.5	8.0	4.8	6.5
6. Konongo	3.5	9.5	2.3	1.1

Note: These figures were obtained by dividing the reserves at the end of each year by the number of tons milled during the year.

Source: Birmingham, W. (ed.) - A Study of Contemporary Ghana - op.cit. p 26.

At the end of 1962, all the State Mining Corporation Mines held reserves less than four or five years minimum requirement as suggested by the Mines Inquiry. Two of the five state mines had reserves much lower than that at the end of 1960. "Even the Bremang Gold Dredging Co. with reserves for 9.4

years in 1959 and 8.1 years in 1960 had enough for only 4.9 years in 1962."[35] The case of Bibiani was much serious, with a fall in reserves from 7.9 years to 1.5 years between 1960 and 1961.

A fall in reserves was not the only cause of the decline of the State Mining Corporation Mines. In all mining industries, prospecting efficiency of the geologists would contribute a great deal to the life span of the industries. Even where it could be estimated that reserves were high, the period of operation could be curtailed on account of inefficient geologists. There was no doubt that the State Mining Corporation lacked qualified geologists as well as efficient managerial ability since the take-over of the mines seemed to be an untimely and unplanned one.

7.4 Conclusion

In the forest zones of Southern Ghana, farming is for cultivation of crops and not necessarily for raising of livestock on any large-scale because of trypanosomiasis disease which the abundance of tsetse flies in the area are the vectors. As a result the system of agriculture has been forest fallow practices where animal manure is not used as in the northern savannah areas. In addition to farming the forest products form one of the main sources of income for the population. The presence of the high forests do not impost much problem but rather it is the rate of depletion of the vegetation that tends to be a hinderance to development. With the increase in population, clearing of the forests for cultivation and other purposes has been faster in recent decades than before. Consequently, the fertility of the soil is seriously affected. In the absence of animal manure, the use of artificial fertilizer is the best solution to the soil depredation but since the fertilizer is an imported manufactured product, its use has made farming more expensive.

The government's control and reservation policy seem to have been effective but it appears that a wider range of areas should have been set aside for reservation purposes earlier than when the policy was introduced. This would have placed a limit to the increasing practices of shifting cultivation by the natives. Although the policy seeks to control the indiscriminate felling of the economic trees, it does not enforce replanting of the trees. Quite recently, the warning to the government as to the danger ahead of the timber industry on the supply side owing to the high rate of felling of trees, has compelled the government to detail the Forestry Division to make replanting

in the reserved areas. Even so, the replanting process is slower than the rate of felling of timber. Unless the replanting is carried out on large scale at a faster rate to include the unreserved areas, there is still a possibility of the country becoming short of timber supplies in future.

The mineral resources form another important aspect of the national economy. The mining industries require large capital investment and well qualified technicians. Because the average Ghanaians could not afford to run mining industries, due to the high capital investmant required, the sector became foreign private dominated for a long period of time. During the period, production increased steadily. Later on the state participated in the industry but production increased steadily. Later on the state participated in the industry but production declined. There are doubts as to whether it was the decline in production that necessitated the state's participation, as some writers allege or it was its participation that brought about the decline. The shortages of ore deposits in the mines and the strict measures that the state enforced on the Companies could be part of the cause of the decline in production. However, after the state's take-over of majority of the mines, it seemed inefficiency as a result of mismanagement and lack of qualified technicians were the factors that contributed greatly to the low production of the state mines because the "take-over" was sudden.

References

1. See A Foggie - "The Role of Forestry in the Agricultural Economy" - in J.B. Wills (ed.) "Agriculture and Land-Use in Ghana" - p 234.
2. Lane, D.A. - "The Forest Vegetation" - in Ibid - p 161.
3. Foggie, A. - "The Role of Forestry in Agricultural Economy" - op.cit. p. 320.
4. Ibid - p 230.
5. Foggie, A. and Piasecki, B. - "Timber, Fuel and Minor Forest Produce" - In J.B. Wills (ed.) - op.cit. - p 240.
6. See Ollenu, N.A. - "Aspects of Land Tenure" in W. Birmingham (ed.) - "A study of Contemporary Ghana" - Vol. II - p 262.
7. See Foggie, A. and Piasecki, B. - op.cit. - pp 240-1.
8. See The Concession Act, 1962 (Act. 124) Timber Lease and Licences Regulations, 1962.
9. See Foggie, A. and Piasecki, B. - op.cit. - p 240.
10. Ibid - p 241.
11. Ibid - p 240.

12. See Foggie, A. - "The Role of Forestry...." - op.cit. - p 233
13. Ibid - 233.
14. Ibid - p 233.
15. Culled from the Magazine, - "Timber News" - Vol. 4, No. 2 - April/June, 1976 - p 15.
16. "Ghana Timber News" - No. 6 - October - 1974 - p 2.
17. See Foggie, A. and Piasecki, B. - op.cit. - p 236.
18. ekki (kaku) - Lophira alata Banks ex. Gaertn. f. In 1956 only 1,112 Hoppus feet of logs and 5,348 cubic feet of sawn timber valued at 2,616 Ghana pounds were exported. None was exported in 1957.
19. Foggie, A. and Piasecki, B. - op.cit. - p 236.
20. See Ibid - p 238.
21. Ibid - p 238.
22. Ghana Handbook of Commerce and Industry - Accra - p 25.
23. Ghana Timber News - No. 6, October, 1974 - p 3.
24. See Birmingham, W. (ed.) - "A study of Contemporary Ghana" - Vol. I - p 250.
25. Among all the examples cited, clay was the only exception because it was used on large-scale for making pots, coolers and hosehold dishes, etc.
26. The type of the machinery and equipment to be used depended on the nature of the mineral deposit. In the case of gold, there were those underground; those in the river basins and those in alluvial or open cast deposits. The underground deposits were of two types - the quartz reef and banket deposits.
27. The Central Bureau of Statistics Economic Survey, 1960 - paragraph 143 - as quoted by Birmingham, W. (ed.) - op.cit. - p 251.
28. Birmingham (ed.) - op.cit. - p 257.
29. Ibid - p 257.
30. See Ibid - p 259 - For the summary of gold mines operating in Ghana. See Ibid - p 252.
31. Ibid - p 259.
32. Ibid - p 253.
33. Ibid - p 259.
34. Ibid - p 259.
35. See foot-notes in Ibid - p 261.

Chapter 8

THE NEW STRATEGY OF THE ECONOMY

8.1 Introduction

At the time of independence, Ghana had every chance of success in its development programmes. There was a large amount of unskilled labour of family and migrant type available to work on the abundant agricultural land to develop the livestock and other cash crops to supplement the cocoa production. The country's financial position too, was quite favourable in terms of foreign exchange reserves. Ghana was among the highest income per capita countries in Africa, excluding the Republic of South Africa. In addition, Ghana's economic performance in terms of land area, ranked first among some selected African countries, on broader international comparisons. (See Table 16).

Table 16

INTERNATIONAL COMPARISONS OF ECONOMIC PERFORMANCE IN SELECTED COUNTRIES - 1960

Country	Gross Domestic Product (£ million at market prices)	Population (thousands)	Area (thousands sq. Km)	GDP/ Population (£ per head)	Population/ Area (persons per sq. Km)	GDP Area (£ per square Km)
Ghana	469	6,727	238	70	28	1,971
Nigeria	1,023*	35,091**	924	29*	38	1,107*
Tanganyika	197	9,239	937	21	10	210
Southern Rhodesia	274***	3,640	389	75***	9	704
Zambia	209***	3,210	746	65***	4	280
UK	25,073	52,539	244	477	215	102,758
USA	179,327	180,670	9,363	993	19	19,153

*1957 prices.
**UN estimate for 1960 - dated by the 1963 census, the evaluation of which is still pending.
***At factor prices.

Source: A.W. Seidman - "Ghana's Development Experience" - East African Publishing House - Nairobi/Kenya - 1978 - p 4.

With the average population density of 73 persons per square mile (1960 Census) and an annual growth rate of 2.4% (1960-70) essentially coupled with a subsistence economy in which nearly all export items were of primary type, Ghana was an under-developed country by European standards. On the African continent, it was partially developed, especially when compared with its neighbours, south of the Sahara. Ghana enjoyed much higher standard of living. This was so because of the degree of its subsistence economy was being changed after 1945 by rapid commercialization of the resources into an exchange economy.

In the ancillary services, Ghana ranked best among her neighbours. In 1958 the number of people served by public water supplies rose to 1.05 m. representing over 20 per cent of the population. Electricity supplied by public and private companies together totalled in the same year 311.5 m. kilowatt hours. The number of properly managed hospitals was 62 and in the realm of education, the total of primary schools rose to 3,402 and middle schools to 1,030.[2]

An Agricultural country requires a good infra-structure so that the farm products from the rural areas can reach the urban centres without deteriorating in value. In this respect, Ghana's communication network was good by West African standards. The mileage of bitumenized roads (1,900 in 1957) was an item of special importance. In addition there was larger mileage of gravel but all weather roads which were regularly maintained and identified as "class I" roads, bringing the total mileage of all classes in 1957 to 18,663 which represented nearly 10 miles of road for every 50 square miles of country.[3] In addition, motorable tracks were being regularly constructed into formerly unexploited forest and savannah areas of first settlement. These tracts served as important feeder-roads and communication media for the people in these remote areas. The greater part of the road passenger transport was in the hands of private operators and therefore no figures of passenger mileage was available for comparisons. However, "the figure of road vehicles (all classes) with current licences for 1958 was 36,696 which could be used for comparative purposes of the road transport system. It showed that one vehicle was for every 130 persons in Ghana.[4] This would not be a high figure when compared with industralised country; but if compared with say, Nigeria where there was one vehicle for every 666 persons,[5] the Ghana figure was much higher in terms of land and population sizes of the two countries.

Furthermore, Ghana was fortunate to take over from experienced expatriate officers who had served in both public and private capacities, for British Colonial Service Officers held about 80 per cent of all established posts in Administrative grades. There was also a sizeable Ghanaian commercial and professional class with many Africans established in teaching, the law, the church, the civil service and the liberal professions. Most important, some Ghanaians had shown keen entreprenurial ability.[6]

Judging from all such favourable economic conditions which existed at the time, most observers were convinced that Ghana would be able to make a breakthrough in her economic development programmes. Sir Arden Clarke, the last British Governor-General of the Gold Coast, was quoted to have observed and remarked that, "if Ghana, with the significant progress already made and its relatively large pool of trained manpower, could not successfully carry out its development programme, then few African States would be likely to succeed".[7] The truth about the country's economic strength with which to commence developments was not hidden. The active politicians who led the country to independence were aware of it. Dr. Nkrumah, who assumed office as the Prime Minister, at one time said. "We are the sixth largest producer of gold in the world and the fourth largest producer of manganese. Cocoa, of which we are the largest single producer in the world, comes from farms which are entirely African owned and therefore, in regard to this - by far the most important of our exports - we are in no way dependent upon foreign capital. The amount of public debt is very small, and much of our development such as the building of Tema harbour has been financed out of development funds and not, as in other countries, by borrowing."[8] Indeed, the statements were bold and full of determination.

Although the first National Government took over the administration of the country from 1951, the major changes in the economic policies came after the attainment of independence in 1957. It would be recalled from our discussions in the preceding chapters that the first decade after the second world war was a period of consolidation and adjustment of programmes to fill the vacuum of the economic and social needs that had been created by the war. The period was a colonial one and all the programmes and plans prepared or formulated were largely initiated and directed by the colonial government to conform to the system of capitalist mode of production as existed in the United Kingdom. During the time of intense nationalism, the leading African politicians alleged that, capitalism was incompatible to social and

economic norms of Ghana because Ghanaian society was historically built upon socialism. What they meant by "socialism", the objectives and plans they had in mind to restructure the socio-economic developments in the country when they wielded the political power would be the main committment in this chapter.

8.2 Economic Nationalism

During the independence period, the leaders of the ruling party declared that, the reconstruction of the socio-economic structures of the country must proceed along "the socialist path" because "socialism is our only alternative".[9] The explanation given in this direction was that to follow the capitalist way of development would mean that control of national economy would continue to remain in the hands of foreign private capitalists. Nkrumah himself declared, "the aim of our party is to develop our economy, modernize our Agriculture and industrialize Ghana from a system of colonial economy and create a system of independent economy. Our ultimate objective is the creation of a socialist society, for we believe that only in such a society will our people have the opportunity of making the maximum contribution to the wealth, happiness and prosperity of our society as a whole".[10] The statement showed that the Party "goal of economic nationalism was a creation of an indigenous entrepreneurial class to replace the aliens who controlled the economy during the colonial epoch".[11] The historical evidence purported that the entreprenurial class was to emerge on institutional basis on one side and a large share of public ownership on the other side. In the beginning, while few Ghanaians knew what this type of socialism was about, many Western European observers looked very askance at the party's new strategy. On many occassions the party leaders argued that, "while Britain pursued at home co-existence with the Soviet Union this was never allowed to extend to British Colonial territories. Books on socialism, which were published and circulated freely in Britain, were banned in the British Colonial Empire, and after Ghana became independent it was assumed abroad that it would continue to follow the same restrictive ideological approach. When we behaved as did the British in their relations with the socialist countries we were accused of being pro-Russian and introducing the most dangerous ideas into Africa".[12]

The new ideological stand of the party influenced all the government's policies. The role that the state played in the developments was mostly reflected by its active participation in the Agricultural Sector. Again,

the government planned to diversify Agriculture. The time for Agricultural diversification was much overdue because the increase in population and the economic activities on the land had shortened fallow periods of the traditional farm practices. The crop yields on the farms were seriously declining as soil conditions became poorer and poorer. Consequently, increase in production was the main strategy of the government's agricultural diversification policy. Attempts to increase agricultural production were the strategy of the diversification policy which embraced the theories of the essential models of post-war II economic development. First, to ensure increased agricultural productivity per man as also per acre to release manpower for industry. Secondly, while it was necessary to increase export of agricultural produce to earn foreign exchange to buy essential capital equipment, increased domestic production of local foodstuffs was necessary to feed the gorwing population and to cut down food import, thereby saving foreign exchange. Thirdly, there was also a need for increased domestic agricultural production for raw materials to feed the growing home industries.

How far the theories were put into practice was difficult to see. The government had formally committed itself to socialism and all its intentions were to adopt a socialistic planning. However, the policy of socialism was not immediately pursued until the country was declared a Republic in July, 1960. "In 1962 the government adopted what was known as the Party's Programme of Work and Happiness. It proclaimed our fundamental objective as the building of a Socialist State devoted to the welfare of the masses."[13] Since "Ghana was a colonial creation - the product of European trade and rule,[14] there was bound to be a conflict between the implementation of the government's development policy along the socialistic lines and the european capitalists' interests. It would be difficult to imagine how a government could successfully build a socialist state with the help and advice from the capitalist world. It seemed as if it was Nkrumah alone who could do it. In one of his political speeches he declared, "the wounds of poverty, ignorance and disease caused by the colonialists on African soil would have to be healed at their own expense.[15] This could mean that he intended to finance the major part of the national developments with Western European capital. Another conflict ground was the seeking of economic advice from Western European economists. One could hardly imagine how a western trained economist could advise a government of a newly independent state to undertake its economit developments along socialists' lines? Let us consider the case of Prof.

Arthur Lewis from Manchester University who was invited to prepare plans for industrial development in Ghana. Among all things in his report submitted in 1953, he recommended that the government must "announce its attitude to foreign enterprises, welcoming such enterprises [...], guaranteeing free transfer of profits and dividends, and fair compensation independently determined if nationalisation takes place [...]"[16] Although the advice was realistic since it could have attracted more foreign private investments it was not fully enhanced in the development policies. Nkrumah himself once declared, "in our Seven-Year Plan we recognised the value of foreign investment in the private sector, particularly in the production of consumer goods, the local processing of Ghanaian raw materials and the utilization of Ghana's natural resources in the areas of economic activity where a large volume of investment was required. We did not intend to allow them to operate in such a way as to exploit our people. They were to assist in the expansion of our economy in line with our general objectives, an agreed portion of their profits being allocated to promote the welfare and hapiness of the Ghanaian people".[17] Such a policy was contrary to the suggestions of Prof. Lewis. But once a government has found it necessary to intervene in the economy, whether directly or by influencing the private sector, it must formulate the decisions and policies that constitute its strategy.[18]

8.3 Growth of Establishments and Employment by Ownership

Under the socialist plan the entire economy of the country was divided into two broad ownership systems - the private sector and the Public sector. William Steel has computed and analysed the growth of these two sectors and their labour employment from 1957 to 1971 as follows:

Table 17

Compound Growth of Establishments and Employment by Ownership and Period, 1957-71 (percent per annum

Period	Establish-ments	Total Employ-ment	Private Employ-ment	Public Employ-ment
1957-61	2.4	5.9	0.7	10.2
1961-65	1.6	3.1	-2.8	6.5
1965-66	-9.8	-7.9	-17.0	-5.1
1966-69	3.7	3.9	6.3	2.9
1969-71	-2.1	0.1	-2.8	1.3
1957-71	0.2	2.3	-2.5	5.1
Average annual growth, 1957-71	1.0	3.2	-1.2	7.3

Source: William F. Steel - "Small-Scale Employment and Production in Developing Countries - Evidence from Ghana" - p 46.

The two different governments' post-independence economic policies are reflected in the above table. First, was the impact of the socialist policy and public employment. The period of the intense socialism is divided into two sub-periods (1957-61 and 1961-65). During the first sub-period (1957-61) the compound growth of public employment was 10.2% as against 0.7% in the private sector. Practically, this was not unreasonable since the government's policy was to strengthen public ownership partly by nationalisation and partly by setting up more state organisations. In the former case, it was evident that a large number of mining industries were taken over and in the latter's case, new organisations such as State Farms, Workers Brigade, etc. were set up during the sub-period.

The second sub-period (1961-1965) was continuation of socialist plans and policies. In fact it was the period when the socialist policies were highly intensified as it is evident by the fall of the private employment sector. (See Table 17). In William Steel's analysis, he did not explain why the growth in public employment also fell to 6.5% during that sub-period. In the absence of any official information about what happened to the public employment sector we assumed that the decline was due to the discontinuation of almost all the nationalised gold mining industries in the country. On the whole, public wage employment grew at a compound annual rate of 5.1% over the entire period.

In February, 1966, the Socialist Government was overthrown by the Ghana Armed Forces which in turn, took a different approach towards economic policies. They alleged that a large number of the public labour force was not productively employed and therefore the new regime resolved on labour retrenchment exercises. Again, there was import restriction policy and that alone affected the private sector since essential industrial raw materials became scarce; hence the fall in the employment figure (-17.0), in the private employment sector.

In the 1966-1969 period there was high pressure on the military government to relax the restrictions on imports owing to the accute shortage of industrial raw materials and particularly farm machinery. Most of the public establishments had previously been sold out to private companies, others were standing idle. Following the deteriorating of the economic conditions and the pressure from the general public, the government was compelled to adopt liberal economic policies. The import restrictions on essential items were relaxed, while a few of the idling public establishments were recommissioned; for example, the State Farms began to operate and Workers Brigade Farms recommenced under a new name, "Food Production Unit" and this time became directly responsible to the Ministry of Agriculture.

The 1969-1971 was a period of transition from the Military to the Civilian government of the Second Republic of Ghana. The conditions of economic performance was not all that favourable in both the private and public sectors. Dr. Busia's (Prime Minister) early introduction of the Aliens' Compliance Order 1969, which was enforced in 1970 expelled all Alien Merchants, mostly the Lebanese businessmen, African Traders and the alien cocoa sharecroppers from the country. Hence, the fall in employment in both the private and public sectors.

Table 18

Compound Employment Growth by Sector, Period, and Ownership - 1957-1971 - percent per annum

Sector	1957-61	1961-65	1965-66	1966-69	1969-71	1957-71
Agriculture:						
Private	-12.1	0.4	-24.5	14.7	-7.7	0.1
Public	11.1	6.6	-10.6	-3.0	0.2	

Source: William F. Steel - op.cit. - p 47.

From our previous discussions the above Table is self-explanatory except that no particular reason was given to the decline of employment in the Agricultural sector during 1965-66 period. Steel must have included the massive retrenchment in the public sector which took place only after February, 1966; otherwise there was no reason for the figure -10.6% in the public employment sector. 1965 was a year of high socialization programmes and employment in all public sectors, particularly in agriculture.

8.4 Attempts at Agricultural Modernization

For our purpose, the attempts of Agricultural Modernization began in 1951 when Nkrumah's era of socialisation programme started and ended on February 24, 1966. The Agricultural Development Programme during this period is divided into two parts, thus:

(a) the introduction of Farm Mechanical Technology.

(b) the promotion of public and co-operative/collective ownership of farm enterprises.

Nkrumah's era was followed by two re-actionary governments; one Military (1966-1970) and the other civilian (1970-1972) regimes. The policies of these two regimes are, altogether classified into:

(a) de-socialisation of public ownership.

(b) expulsion of alien-farmers.

Another important period was the one which began in 1972 and ended in 1978 under a second military regime which seemed to have no declared ideological stand in its agricultural development policies. The government's agricultural policy was based mainly on the principles of self-reliance with so-called. "Operation Feed Yourself" (O.F.Y.) programmes.

8.5 The Agricultural Development Strategy up to 1965

Although we have already explained that the change of development strategy was politically motivated at the time the national government took over the administration of the country and that socialism was the declared socio-political objective of the ruling party, the Convention People's Party (C.P.P.) led by Dr. Nkrumah, in practice the new approach was a response to economic crises which were rooted particularly in the agricultural sector of the economy. The large agricultural enterprises such as the Agricultural Development Corporation (A.D.C.) with its commercial and farm settlement

objectives, etc. had all been a failure. Among the agricultural crises were rising food-shortages and high prices in the country. The increased importation of food-items to counter-balance the crises resulted in high trade deficits.

Besides the food-shortage problems was also a problem of rural-urban migration of youths from primary and secondary schools in search of jobs. This was not unusual since the rate of population growth (3% per annum - 1948 census) had resulted in more births of children but less death-rates (improvement of medical facilities) in the country. In addition, the expansion of educational provisions which was later followed by the government's policy of compulsory fee-free education meant that more children left school every year and decided to move to the urban centres in search of jobs. The traditional system of farming was no longer able to provide food for the nation. Agricultural productivity had to be raised and changed from a purely subsistence level to cultivation carefully designed to provide adequate food for a rising population while supplying local industries with raw materials and producing cash crops which could pay for necessary industrial imports. As a measure of solving the agricultural crisis, the government decided to increase its participation in the economic process to go into direct production, and also as a means of solving the unemployment problem to promote agricultural production through a co-operative/collective means. Before we examine the state's active participation in the economy, we shall first have to see the fundamental approach towards the government's declared intentions.

Under the proclaimed socialist plan, the entire economy of the country was labelled, "a mixed economy" in which the economy system was divided into several sectors with the state exercising overall control of the major activities of the various sectors, as follows:

1. State Enterprises
2. Foreign Private-Owned Enterprises
3. Joint Enterprises owned by the State and Foreign Private Companies
4. Co-operative/Collectives and Marketing Boards
5. Exclusively reserved Ghanaian Enterprises[19]

We are much interested in the State Enterprises in agriculture and for that matter the state programmes in that sector will be examined in more detail.

In the agricultural sector, the government's policy was to set up a new mode

of production organisation, along socialist lines. The socialised agriculture, though it began gradually, it was not rigidly enforced until after the country's republican constitution came into force in 1960. The state production units were as follows:

1. The State Farms - As State Farms Corporation (SFC).
2. Ghana Builders Brigade but later known as Ghana Workers Brigade - A State quasi-collective farm organisation.
3. United Ghana Farmers Council Co-operative (UGFCC) - A state supported; a state directed and a state controlled farm organisation - To take-over the marketing of cocoa and agricultural extension services.
4. Youth Settlement Farms under the name Ghana Young Farmers League (YFL) politically called, "Ghana Future Farmers".

According to the Seven-Year Development Plan,[20] the main objectives and the roles of the new state agricultural sectors were as follows:

1. To pioneer the adoption of settled agriculture through the establishment of large-scale, mechanised, centrally-directed farms.
2. to raise the efficiency and productivity of agriculture through the massive and systematic introduction and promotion of new technology;
3. to bring under cultivation the vast expanses of the idle land in the country;
4. to raise the output and marketing of agriculture, particularly in strategic products, viz, import substitutes, livestock, raw materials and export crops;
5. to reduce the urban flow or rural youth by offering them employment in the sector;
6. to supply the urban populations with cheep food;
7. to raise the rate of savings and capital formation through the generation of surpluses and profits.

The government's objectives as outlined above were theoretically sound and reasonable. In practice, however, the Units failed to achieve their goals partly due to work-over-load and inconsistencies of programmes and partly because of some political interferences which ocurred in the management of the Units. The SFC, for instance, was assigned additional responsibilities of providing improved genetic inputs and to see to their fair distribution to other socialised Units as well as to the local private farmers. The SFC was again to provide modern social and health facilities on farms.[21] This means that the corporation required not only qualified farm technicians but also trained social workers as well as qualified medical personnel like

doctors, pharmacists and nurses whose services demanded special tools and drugs, etc.

The UGFCC's functions were more complicated than those of other Units. It was initially established to undertake purchasing of all Ghana's cocoa on behalf of the Ghana Cocoa Marketing Board (GCMB). These functions were formerly performed by the foreign buying agents (Cadbury & Fry, etc.) and the co-operative unions in the country. The UGFCC was later, assigned the responsibility of establishing farms on large scale mechanisation basis as well as to take over the functions of extension work of the Ministry of Agriculture. As a result the Extension Services Division of the Ministry was dissolved and its entire personnel seconded to the UGFCC. The Unit assumed full responsibility of administration, and organisation of the three most important functions in the Agricultural Sector - Cocoa purchases, Mechanised Agriculture, Extension services. They were to be successfully undertaken within the general framework of the ruling party's ideological stand, thus:

1. "to foster and promote unity for purpose and action among farmers and improvement of agriculture and allied industries [...]
2. to safeguard the interests of farmers of the country so that they may [...] aspire towards complete emancipation from all forms of exploitation and economic servitude;
3. to be the spokesman of the farming population on all matters relating to agriculture [...]
4. to give instruction and advice to its members on agricultural problems".[22]

Another Unit which was established, in spite of a strong protest from the opposition party was the Builders' Brigade, later called Workers' Brigade (GWB). It consisted of mainly the ex-servicemen of the second world war. They had played active roles as "party-activists" - ("Action Troopers") during the struggle for the country's independence. The ex-servicemen were already in conflict with the Governor from 1945 when they returned from the Far East - Rangoon in Burma, because the colonial government did not fulfil its promise of paying them compensations when they returned home.

After the attainment of independence, the ex-servicemen were to be compensated for the active part they played by giving them employment. There was no doubt that the set-up of the GWB was meant for that purpose. The set-up of the Brigade came soon after independence in 1957 with the following

objectives:

1. "to absorb and mobilise the unemployed such as the ex-servicemen and school-leavers, for capital construction and other projects in the rural areas;
2. to establish training schemes for various trades;
3. to undertake industrial projects".[23]

At the time the Brigade was established, the Gonja Development Corporation (GDC) which was set-up by the out-going colonial government had failed and was liquidated. The Workers' Brigade was therefore made to take-over the farms of the ersthwile G.D.C.

The Ghana Young Farmers League (YFL), as the name suggests, was established to settle the middle school leavers and uneducated youths on farms in order to take up farming as their career. The members of the League were popularly known as "Ghana Future Farmers". The other assignments of the League were:

1. "to develop cottage industries on the farms;
2. to instruct its members in the Party's Socialist Programme".[24]

In order to evaluate the general performance of the four Units under the socialised Agriculture, it is necessary to examine briefly the character and political stand of each of the Units. Apart from the name, the State Farms Corporation was nothing newly established. It was the former State Agricultural and Experimental Stations that were re-named, "the State Farms Corporation", following the devolution of Division 'A' of the Ministry of Agriculture. The government's new policy was to re-name all the Agricultural Stations which were also to take-over all plant and machinery, the entire staff, etc. of Division 'A'. The arrangement was fair and reasonable since the SFC inherited the experience of both the well-trained technical and administrative personnel and took-over also, better planned farms most of which had already been developed. Thus of all the four Units, it was the SFC which performed well in certain specific fields. The SFC's performances in the poultry and plantation crops (excluding Cocoa) were impressive. Perhaps, this was the reason why after the over-throw of Nkrumah's Regime in 1966, the Military government did not abolish the SFC despite all the government's hostile attitudes towards other state-owned enterprises.

The Workers Brigade, originally established as Builders Brigade had 3 divisions which dealt with construction, industrial projects and culture. In

1960, it was re-named "Workers Brigade" and made to become one of the socialised Agricultural Production Units of the state. It was to undertake food production and livestock on large scale mechanised basis.

Theoretically, all the four Units were directly responsible to the Minister of Agriculture, in practice, however, they became the integral wings of the ruling party; it means they were subject to control and directives mainly from the Central Committee of the party, even on purely technical matters. In order to enforce the socialisation of agriculture, the government had to re-organise the Ministry of Agriculture in such a way that the important service divisions, cocoa and the general agricultural services were dissolved and their man-power and other resources transferred to the newly formed Units. The Ministry of Agriculture itself was not dissolved but under the new policy it lost its responsibilities of assistance to the pesants, especially the small-scale farmers to the UGFCC. A large sum of money was invested to make socialisation in agriculture become a reality.

8.6 The Mode of Operation and performances

As already mentioned, the SFC showed progress in the fields of poultry and plantation crops (rubber, oil palm, coconut palm, citrus, kola). The rest of the Units of socialised agriculture and their employees existed merely as party functionaries and party activists respectively. Unfortunately the available data does not permit full evaluation by quantitative means. On the whole, productivity of the operative organs for socialised agriculture was very poor and even lower than on traditional farms. What caused the failure of the government's bold and radical attempt at socialised agriculture?

The causes of the failure were many but three factors will suffice for analysis:

1. Politics was used as the vehicle to transfer new technology. As a result, expert advice and experiences of failure of previous attempts of mechanised agriculture such as the ADC projects, etc. were ignored.
2. Because of political interruptions, farm management and labour control on the farms were weakened. The trained technicians were made subordinates to the party-appointees of District Secretaries and Chief Farmers whose decisions were final. It would not matter if the gentleman were qualified and issued correct directives. Efficiency fell

because of weak control of farm labour. The laziest and habitual absentee workers happened to be the best party activists well known in high Party circles. For fear of possible intimidation, a technical officer assigned to a project was not in any good position to control labour effectively.

3. The whole organisation and control of socialised agriculture was unplanned. The farmers in the same localities were persuaded to participate in several different programmes of each of the four Units. This proved that although the four socialised Units belonged to the same Party, no collective efforts to ensure the success of the major programme of the Party existed among them.

The attempts to introduce new technology, that is, the replacement of primitive traditional tools with new implements and machinery on the farm failed because no research and experiment had previously shown which type of technology would be appropriate in the various localities. In Ghana, there are wide variations in soil type and topography and it would be wrong to assume that one type of farm implement and machinery would be suitable for all areas in the country. Little experience in Wenchi District (Brong Ahafo Region), for example, showed that while disc-ploughs were a more appropriate implement and efficient on peasant farms, mould-board ploughs were suitable only for work on the Agricultural Station.[25] The soils along the Volta Basins are heavy-clay and they demand special farm implement and machinery other than light ploughs and tractors.

The socialised agriculture, according to the government's objectives, was the introduction of new technology, mainly farm mechanisation. The mechanisation programmes also failed because:

(a) the importation of the machinery was used as a political link between Ghana and the East European countries. In 1951 when Nkrumah stated that he would 'be appealing to the democracies of Britain and the United States for assistance in the first place', he also added that if this should not be forthcoming he 'would be forced to turn elsewhere'.[26] His "elsewhere" could mean East Europe. When by 1960 Ghana had not secured a single official loan from the West, Nkrumah was urged by a number of leading CPP radicals to follow up this earlier hint and approach to the East became necessary. The action fitted in well with the new policy of non-alignment.[27] When loans became avail-

able from the East a large collection of models and makes of farm implements and machinery were imported from the donor-countries. When the machinery arrived, they were distributed throughout the country immediately without first finding out which models and makes were more appropriate to certain local conditions according to the specific tasks.

(b) there were not sufficient trained operators in proportion to the high number of machines and implements that arrived. One of the immediate problems was the transportation of the tractors from the harbour to the Central Mechanic Tractor Station (MTS) and then to the Regional and District Centres. The problem was painfully solved by falling on any person, for example the unemployed youths in the capital who could, at least, manage to move the wheel-tractors after a few minutes spot instruction. Many of the youths had no previous knowledge about driving at all. Once a person was able to drive a particular tractor to a destination in a district he was automatically employed as a tractor operator in that district. Almost all the wheeled-tractors were driven to and handled in that manner in the districts. Apart from the fatal accidents that ocurred through inexperience driving and rough handling, we can also imagine the seriousness of the pressure exerted on the wheeled tractors which were driven from Accra to say, Bawku in the Upper Region - a distance of about 600 miles.

(c) The third problem was the maintenance of the machinery. The wheeled-tractors which were to be used regularly on farms had already been mishandled before they arrived in the districts. Although until after the overthrow of the government in February, 1966, spare parts were available and forth-coming,[28] the problem was that most of the operators were inexperienced and had no practical knowledge about daily routine maintenance. When a slight problem ocurred in the field of operation the farm work came to a stand-still. There were much more problems on co-operative farms, in particular because they were not well stumped and cleared before orders were given to render services. Implement breakages, tyre punching and idling of tractors in muddy places on farms, etc. contributed to the low productivity on mechanised projects.

Table 19

Land and Labour Resources of Socialised Farms - 1965

Item	SFC	Brigade	Co-ops	League	All
1. No. of Stn./Socs.	123	47	870	37	1,077
2. Total Acs. planted	64264	19140	18413	1950	103,767
3. Total labour (workers)	22000	9279	15320	1692	48,291
4. Av. labour/Stn.	178.9	197.4	17.6	45.7	44.8
5. Av. labour/Acre	0.3	0.5	0.8	0.9	0.5
6. Av. Acres/Stn.	522.5	407.2	21.2	52.7	96.3
7. Av. Acres/man	2.9	2.1	1.2	1.2	2.1

Source: Ministry of Agriculture, Pilot Census - 1965.

Another cause of inefficiency of socialised farms was due to lack of co-ordination and control of the sector. The four Units existed separately from each other, though they were all under one Party. Each Unit organised and controlled its own workers through its headquarters, regional and district offices but the organisation and control were mainly on more political activities than on the actual assignment of agricultural production where there was a need for regular flow of technical information and quicker adjustment of farm programmes to suit local conditions. Since the technical information required was neglected, the connection between the Units as a whole and the technical personnel from the Ministry of Agriculture was broken at the time when efficient control of labour should have helped to step up production on farms. The co-operative system of the socialised agriculture also failed mainly because, "the principle of democratic centralism and the democratic election of district farmers and chief farmers by annual conventions of the co-operatives were practically non-existent".[29]

8.7 The Period of Instability of Agricultural Policies

This period is classified into three sub-periods as follows:

(a) 1966-1970 - The first Military Government under the National Liberation Council (NLC).

(b) 1970-1972 - The Civilian Government of the Second Republic of Ghana under the Progress Party led by K.A. Busia as Prime Minister.

(c) 1972-1975 - The Second Military Government under the National Redemption Council (NRC).[30]

The Sub-Period - 1966-1970

On February 24, 1966, the Socialist Government led by Nkrumah, was toppled by a group of Army Officers and immediately formed an administrative governing body known as the National Liberation Council (NLC) with an Army General (G.A. Ankrah) as the Chairman of the Council and Head of the State. The NLC's immediate and important tasks were threefold. "First, it had to come to terms with creditors on the arrears and debt-service payments due in the remaining ten months of 1966. Second, and affected by the outcome of the first, it had to curtail the import bill for the year to the foreign exchange that was likely to be available, and at the same time ensure that Ghana could continue to import essential supplies from reputable sources on normal commercial terms. Third, it had to review the government's tax and spending programmes to prevent complete collapse in the finances of the public sector, and at the same time reduce demand for imports with the minimum possible dislocation of domestic output."[31] To tackle these three major tasks, "the NLC was clearly oriented towards the West, and was anxious to re-establish friendlier relations with the governments of those countries".[32] The new government turned to ask for help financially from the International Monetary Fund (IMF) and some Western governments. It was not unreasonable that the West expected favours in return for their financial assistance. The NLC resolved to take anti-socialist policies and the impact was greatly felt later in the agricultural sector of the economy. Three out of the four socialised Units of the sector were abolished and the workers retrenched. The fourth one, the SFC, was however, retained but several of its farms together with large number of state-owned enterprises were sold to foreign private companies.

The de-socialisation policy brought significant reduction of farm and industrial workers in the public sector. Hence the changing trend of employment from the public to private sector began in 1966. (See TAble 17.) In its first budget speech in July, 1966, "the NLC announced that it had 'started the process of systematically laying-off workers who are not contributing anything to production', adding in an ironic note that there was no 'intention that these workers who were previously being paid for doing nothing should continue to do nothing, the only difference this time being that the Government (would) not pay them'".[33]

The NLC had no realistic plans for agricultural development during its four years in office. It was because the Council concerned itself solely with its stabilisation programme as an attempt to restore the national economy. In theory the stabilisation programme was sound and hopeful of success since it received Western financial support and advices of international recognition. In practice, however, the stabilisation did not take the path for which it was set. Few factors will suffice for explanation of this point. First, the NLC became divided in their decision-making primarily due to tendencies of members amassing wealth unscrupulously. During the trial of Lt. Arthur who had attempted to over-throw the NLC government in an abortive coup in 1967, he said that the Ghana Armed Forces in which he was a member toppled Nkrumah's government because of corrupt practices which led to mismanagement of the country, but the NLC had resorted to the same practices. The leader of the abortive coup and his colleagues were executed by Firing Squad in Public. Few months later, a leading member of the NLC appeared on Ghana Radio and Television to announce that the Council's Chairman and Head of State, General G.A. Ankrah had been deposed of his post and dismissed from the Council because he had received a bribe involving a heavy sum of money from a director of a foreign company in connection with the issue of an important licence. The announcement went further to state that upon interrogation General Ankrah himself admitted that he received the money but he had not made use of it at the time he was being confronted. The issue on import licences as a measure of import restriction was not fairly and genuinely conducted in view of corrupt practices. A Lebanese merchant, for example, could manage to get licences covering a variety of items involving huge sums of money but would sell the licences, instead of making the import himself, at exorbitant prices to those who required them. Thus the exercise of issue of import licences became a trade in which many different wholesalers and retailers played a role of unfair distribution. Second, since the issue of import licences became an unfair deal, important items such as agricultural inputs were neglected. Who would care to import say, peticides or fertilizers (not to mention farm machinery and spare-parts) after a long strife to get an import licence to buy through the back door? Would the importer not gain more by importing a Datsun saloon car which could be sold five times its real costs and which otherwise could be easily used as a taxi-cab should there be no market for it at the required price?

The third factor was the NLC's policy in education. In July, 1966, the NLC

announced its intention of introducing school fees in place of Nkrumah's compulsory fee-free education system. It was an attempt to cut down public spending though the measure was not popular with the low income group of workers and the rural population. The burden of educational costs of children meant parents of farming community would invest less of their income in farming and production would fall.

The fourth factor was the discrimination in absorption of trained personnel into the public service after February 24, 1966. The NLC deliberately refused to recognise the qualifications of the Ghanaian-Trained technicians from the institutions of Eastern Europe. There were qualified doctors, nurses, engineers and agriculturists, etc. These technicians remained unemployed for several months simply because they were trained in the communist countries. Through frustration, several of them had to change their careers while others were forced to return to Europe.

The fifth factor was the NLC's decree which was intended to expel all the aliens petty trading and farm activities from the country but no action was taken on the decree until the civilian government came into power in 1970.

The Sub-Period - 1970-1972

In 1970, a democratically elected civilian government, the Progress Party (PP), led by K.A. Busia, took over the administration of the country from the NLC government. The economic policies of the new government was basically the same as were for the NLC. The government attempted to re-shape the national economy but it soon became unpopular with two of its major economic policies. The one which affected the agricultural economy most was the passing of "Ghanaian Business Promotion Act in which the "Aliens' Expulsion Order" (decreed by NLC) was enforced. The Act sought to eliminate all aliens involved in petty trading or small business enterprises including farming. In consequence, all the alien sharecroppers and farm workers were given an ultimatum to leave the country since they were regarded as squatters on the land. The impact of the departure of the aliens was greatly felt in the cocoa industry and accelerated the decline in production since that period. Farm labour became relatively scarce and expensive. With limited capital resources, the native farmers were compelled to reduce their programmes of expansion.

One of the PP government's unpopular agricultural policies was the introduction of payment by "chits" of cocoa purchases. By the system, a farmer would sell his cocoa but instead of paying him cash on the spot, he would be given a chit indicating the value of cocoa he sold (a form of promisory note) with which he was to collect cash at the end of the season. The official explanation of the policy was that the system would help the farmers in their savings propensities for future investments in their farms. The system failed to take into consideration, how a farmer could pay his farm workers, meet his own daily expenses and honour his debts with creditors before the season ended. It was upon strong farmers' own petition that the system had to be withdrawn after it had already given a bad impression of the government.

Another factor which made the PP government unpopular and eventually contributed to its downfall, was the devaluation of Ghana's currency. The government officially devalued the country's currency by 30 per cent as one of the measures to check inflation. The devaluation and the government's rigid import control measures resulted in high prices and scarcity of essential commodities on the market. Towards the end of 1971, the whole country was turned into confusion. While the Trade Union Congress (TUC) stood up strongly on behalf of the workers for increase in wages and improvement of working conditions, the Farmers' Unions backed by the traditional Chiefs protested against the Aliens' Compliance Order and petitioned the government to nullify the Act, at least, the part which affected the alien sharecroppers. The government did not accept any of the grievances submitted by the TUC and the Farmers' Unions. The TUC arranged for a general strike of all the workers in the country. The farmers in the rural areas showed solidarity with the workers and joined the strike by refusing to send foodstuffs to the markets. In doing so the farmers thought the government would repeal the Aliens' Compliance Order.

The government reiterated the Unions' actions and dismissed all the leaders of the TUC and at the same time, appointed new leaders of the government's own choice. The workers denounced the government's action and pledged their unflinching support for their old leaders and refused to go back to work. The government dismissed 168 senior civil servants who were suspected of instigating the strikes. When the dismissal action was brought before the High Court (Sallah's Case), the Prime Minister was found to have taken the action contrary to law. The High Court ruled that the dismissed officers

should be re-instated. During the same period of the workers crisis, the Minister of Interior (PP's government) issued a deportation order against two Russian girls to leave the country. Again, when this case was sent to the High Court, it ruled that the Minister's action was illegal (the girls were married to Ghanaians) and that the Minister was to sign a Bond to be of good behaviour during Busia's administration. The Prime Minister rebuked the High Court Order of both cases.

The crisis in the country had not ended when an Army Officer took the chance to topple the PP government in January 13, 1972. In an interview[34] when the leader of the coup (Col. I.K. Acheampong) and the Chairman of the National Redemption Council (NRC) was asked why he took over the Government, he explained that:

> "The Ghana Armed Forces took over the reigns of government on 13th January, 1972, because the same evils which compelled the Army and the Police to topple the Nkrumah regime on 24th February, 1966, persisted. These were: bribery and corruption, tribalism, dissipation of public funds, economic mismanagement, disregard for the constitution, arbitrary dismissal and maladministration in general. There was also interference in the affairs of the Judiciary and the administration of justice to such an extent that the rule of law as guaranteed by the Constitution became a sham."

The two governments (military and civilian) which came to power after Nkrumah's government were short-lived. They had the same economic policies in the sense that both denounced public ownership. The two governments had no unique policy for agricultural development. Their attempts to re-structure the general economy of the country failed to arouse the interest of Ghanaians, particularly the workers and the peasant farmers.

The Sub-pericd - 1972-1975

The third Regime after Nkrumah was another contigent of officers of Ghana Armed Forces who came to power in 1972, under the name, the National Redemption Council (NRC). This confirms our earlier deduction that the former NLC government lacked consensus in its decision-making. When the NRC assumed office, it declared that it was not its intention to reclaim the State enterprises that were sold to the foreign private companies during the term of office of the previous regimes. It added that, the NRC was highly committed to the responsibility of seeing to it that all the idling State enterprises commenced operation as early as possible. In fact there was no delay in re-commissioning all the idling public enterprises. The NRC's economic

policies seemed to favour both the private and public ownership systems. In an interview[35] the Chairman was asked, "the entrepreneurial spirit seems very strong in Ghana. So you think that a more socialist system would be acceptable?" He answered:

> "I am reluctant to talk in terms of labels, but I do believe that the state is bound to play a forceful role, a leadership role in the development of the economy. I have said that a country with our limited resources cannot leave everything to the market forces, and I have said that we have to use state power to capture the commanding heights of the economy for Ghanaians. We can do this without curbing the entreprenurial spirit of Ghanaians. Our concern is to infuse a sense of economic patriotism under the direction of the state."

On 1st October, 1972, NRC announced that the government would acquire majority shares (55%) in a number of foreign-owned private industrial enterprises in Ghana.[36] Again in January, 1973, when the NRC was clarifying its policies towards foreign private investment, it stated among other things that "the government will also, participate in large extractive industries such as mining and timber operations [...] On the whole Ghanaian participation is considered desirable in all areas of the economy".[37] On the basis of these actions, the new government came out boldly with its economic policy of "Self-Reliance" which in short, the guided principle was that "Ghanaians should, as far as possible, rely on their own human and material resources for the economic development of the country."[38] By declaring the policy of self-reliance, the NRC tried to justify its action of over-throwing the previous government thus:

> "The state of the economy at the time of the change of government in January, 1972 made it imperative for Ghana to adopt the principle of Self-reliance as the conerstone of the policy for national development.
>
> [...] On the eve of the January 13 Revolution it was apparent that unless something drastic was done there were going to be shortages of food and other foreign items which Ghanaians required for their everyday life. The problem called for solutions and policies which were entirely different from those which led Ghana into the difficulties. These new solutions enjoined Ghanaians to rely on themselves, on their own creative ability, their numbers and skills and on their natural material resources, both for their subsistence and growth as a nation. [...] It is the fortune of Ghana that there has emerged a new crop of leaders who are capable of charting the new paths to national development and of creating in the people the sort of response which the policies require for their success."[39]

The NRC's economic policy of Self-Reliance was expressed in the new strategy of agricultural development. The new government recalled the previously

huge expenditure on agricultural modernisation and expansion which did not help to stop, or even slow down the country's agricultural needs. "Imports of food were particularly heavy; they kept rising until, in 1970, over a fifth, or 20.8 per cent of the value of all imports, were for food and raw materials, drink and tobacco processing industries in the country. In that year Ghana spent the sum of ¢ 87.3 million for those items. The food bill rose steeply from ¢ 34.6 million to ¢ 60.9 million between 1968 and 1970 while imports of raw materials ranged between ¢ 25 million and ¢ 27 million."[40] The government stated that, "a more purposeful agricultural policy could have saved the country a substantial proportion of these huge expenditures",[41] and accused the previous governments of encouraging importation from other countries of food items like corn, rice and fish or raw material like cotton which could have been produced locally to save a substantial amount of foreign exchange.

Along the policy-line of "Self-Reliance" the government introduced a new agricultural development programme, "Operation Feed Yourself (OFY) as a practical approach towards the solution of Agricultural Production problems. The OFY had 3 main objectives as follows:

(i) Production of abundant and better food to feed the nation and thereby eliminate the present food shortage;

(ii) Production of industrial raw materials to supply industrial needs both for import substitution and self-reliance;

(iii) Promotion of export crops to earn foreign exchange to make Ghana solvent and enable us to purchase those essential items which we must necessarily import."[42]

The OFY programme was divided into three phases as above. The first phase which was primarily aimed at encouraging food production was launched on February 17, 1972, (barely a month after NRC's take-over of the Government) by the Commissioner of Agriculture. The main theme of the Commissioner's massage during the launching ceremony was that "Ghanaians should muster all available resources to produce the food needed by the nation or face the consequence of starvation."[43] Phases two and three of the OFY programmes were launched by the Head of the State and Chairman of the NRC himself in 1973 and 1974 respectively. Under the two Phases, large-scale farms were promoted with emphasis on both food and industrial raw material production.

The Organisation of OFY Programme

Unlike the previous agricultural programmes of socialised agriculture, the organisation of OFY programme was much less of political control but rather consisted of too many academicians on both the national and regional levels. The major weakness in the organisation was that none of the farmers' organisations or the Agricultural Workers Unions was represented in the National or Regional Operation Committees and there were no such committees on district or local level. The small-scale farmers had little chance of practically adapting themselves to the modernised methods of farming (as envisaged in the OFY programme) on co-operative basis.

Production Agencies

During the campaign for the OFY programme, all Ghanaians were persuaded to play active part in food and livestock production in order to combat the food shortage problems in the country. Workers were advised to make backyard gardens or poultry pens during their leisure hours so as to supplement the household food requirements. The OFY Programme was described as Ghana's "Green Revolution" which had the effect of involving practically everybody in the country, housewives, students, churches, the unemployed and regional agencies.[44]

On the national level, the Ministry of Agriculture was assigned the responsibility of co-ordinating the activities of four state agricultural corporations, three development boards, and one limited liability company. These agencies together formed one force of participants in the programme. They were:

1. Food Distribution Corporation.
2. State Farms Corporation.
3. State Fishing Corporation.
4. Food Production Corporation.
5. Grains and Legumes Development Board.
6. Bast Fibre Development Board.
7. Cotton Development Board.
8. Pomadze Poultry Enterprises Limited.

Another force of participants were the small farmers whose role in any Agricultural Programme in the country is important because the agricultural population largely consists of small peasant holders. For example, "it is estimated that about 95 per cent or more of the country's total food produc-

tion is by the small-scale farmers who operate with the traditional cutlass and hoe".[45] Since the main staple crops consumed by the rural population are cereals, tubers, etc. the production targets of the OFY were directed at these crops on the small-scale farmers level.

By combining the general activities of these two main production forces, "the government wished to promote and preserve the system of a mixed economy with the private farmer and the public statutory organisations each having a well-defined part to play - the two roles being complementary to one another in the overall task of building up the economic strength of Ghana".[46] For the first time in the history of the country, the government urged the Commercial Banks to take active part in the OFY programme by establishing their own farms. The Barclays Bank (Ghana) Ltd., and the Bank of West Africa acquired large tracts of land and established large-scale farms on a commercial basis in addition to their normal financial lending functions. Thus through the OFY programme a new form of land ownership (Banking institutions) emerged.

Land Acquisition

There was not much problem with acquisition of land for specific farm projects. The small-scale farmers already had their own land. The same thing applied to the State Agricultural Organisations but even where there was a need for expansion, the government took upon itself to negotiate with the local chiefs to ensure that landowners were not deprived of their land-titles before necessary legislation was passed for security purposes. The dry areas which were acquired by the government for irrigation projects under the OFY programme were cleared, laid out properly and allocated to interested farmers with security of tenure after the completion of the project. The Ashiaman and Vea irrigation dam sites were examples of the new land transaction and ownership system. Rent was charged on the land and ancestral owners received a proportion thereof taking into account of the size of the land and government expenses.[47]

Credit Facilities - OFY Programme

When launching the OFY programme, the government considered facilities for credit as an important aspect of the participation of both the state Agricultural Organisations and the farmers. As a result the government guaranteed the Agricultural Development Bank (ADB) loans totalling ¢ 20.9 million

during the first year of the programme to farmers and the state organisations. More than ¢ 14 million was set aside by the ADB for credit purposes.[48] The organisations and the farmers were to receive credit purposely for purchases of important farm inputs. The State Organisations and the large farm owners received credit but the small farmers had little chance for the credit.

Establishment of Regional Development Corporation (RDCs)

As part of the OFY programme, the government established another state-body corporate under the Regional Development Corporations Decree, 1973, which stated that:

> "in pursuance of the National Redemption Council (Establishment) Proclamation Decree, 1972, this decree is hereby made:
>
> (1) There shall be established in each region of Ghana a body corporate to be known as the Regional Development Corporation.
>
> x x x
>
> (2) A Regional Development Corporation shall have the power to carry on any business of an industrial, commercial and agricultural nature."[49]

On the strength of this Decree, the RDC's were established in all the Regions and the responsibility of the operation of the various development programmes was entrusted to Regional Development Committees with their respective Regional Commissioners (Military Officers) as Chairmen. On the Committee were the Executive Secretaries who acted as the Regional Development Officers and therefore Regional Heads of the RDCs. The Regional Development Committees were responsible to the NRC on the national level.

A large sum of money was made available to the RDCs and therefore administrative and technical personnel were recruited to start operation. The various RDCs planned to set up industrial and agricultural projects but in view of financial (foreign exchange) and technical (qualified technicians) problems action was delayed in respect of the planned industrial projects. The RDCs however, tackled few agricultural projects (large-scale rice farms, etc.) but they all proved to be a failure in the long run.

The OFY and the RDC programmes had not reached any successful stage, when the Chairman of the NRC accused several of his collegues in the government that their attitudes were "contrary to the aims and objectives of the

revolution". The Chairman took a stern action to remove several Army Officers from the Council, including the Commissioner for Agriculture and that of Foreign Affairs. The NRC was re-constituted under a new name, "the Supreme Military Council" (SMC) headed by the same Chairman of the defunct NRC. The official reason given for the actions was that the Army Officers who were retired from office were more concerned with their private businesses than the official duties which were assigned to them. It was therefore necessary to retire them to give them ample time to operate their private businesses more efficiently. The unofficial information about the changes in the Council had something to do with bribery and corruption of the high government officials.

The newly formed SMC continued with its agricultural policies. Towards the end of 1975 shortage of food with relative high prices on local markets generated the feelings among the general public of inefficiency of the SMC government. In certain circles, people began to agitate for a constitutional (Civilian) Government. The SMC became aware of the danger ahead of it and therefore came out with a proposal for the formation of a "Union Government". The union government would comprise both the Army Officers and Civilian politicians voted into Parliament. The general public did not like the idea of the Union Government but the SMC attempted to force it on them.

A strong national campaign was launched to educate the public on the formation of the Union Government. The issue of the Union Government became so important to the Council that funds which were for development projects were directed to finance the campaign. That was the end of the OFY and RDC agricultural development programmes. In fact, by 1976, the OFY programme had completely disappeared from the government's priority policy list to pave way for the campaign for the Union Government. Nobody would dare to challenge that the Union Government was not good for the country. People were arrested arbitrarily and imprisoned. At last the SMC spelt its doom by putting the issue of the formation of the Union Government into a referendum. About 70% of the electorate voted against the idea (according to the Electoral Commissioner's sources) but the Chairman of the SMC turned the results of the referendum in favour of the Union Government. The Army arrested the Electoral Commissioner and accused him of distorting the election results. Work Organisations and Student Bodies demonstrated against the government's action. Several of the demonstrators were shot-dead (an incident at Legon University in which two policemen were also killed) others were imprisoned.

There was nothing to convince the government that the people of Ghana did not like the Union Government which constitution had been approved and a date-line set for it to come into force.

For nearly 18 months, the government major priority programme was the formation of the Union Government. All the important agricultural projects and extension services had been relaxed. The results were acute shortage and rising food prices which had never been precedented in the history of the country. People had to line up waiting for hours in order to buy a ball of kenkey (local food prepared from a dough of maize) at ¢ 2 (equivalent to $ 2.00). In 1960s the same size of kenkey was sold at 5 p. The situation of imported consumer goods was worse. A British Broadcasting Corporation (BBC) observer put the inflation figure as between 300-400%. The conditions in the country became unbearable and few members of the SMC themselves forced its Chairman at gun-point to resign. In 1978, the SMC government was also toppled by a group of junior Army Officers and the leading members of SMC government, including its Chairman (I.K. Acheampong) were executed by firing squad for mismanagement of the country's affairs.

Although the NRC/SMC government was very enthusiastic about its policy of Agricultural Development by which it determined to solve the country's food shortage problems it failed mainly because of its conflicting objectives. The OFY programme had not proved successful and only after its first year of inception when the RDCs were established. The efforts and much needed attention for co-ordination and supervision were therefore, divided between the OFY with the peasant farmers and that of the RDCs programmes. Because the RDCs were established and empowered to undertake projects in agriculture, attention to the small farmers' problems were neglected. Since the financial support for the RDCs' projects was higher and easier to obtain little attention was paid to the programme for the small farmers.

Another important point is that the NRC was inconsistent with its economic policies. At one time it was seeking the co-operation of the foreign private companies and financial institutions to participate and support the economic programmes, at the other time, it resolved on partial nationalisation of several foreign private enterprises in which the state took a share of 55 per cent. The government's action could discourage these companies to be willingly make their full contribution.

8.8 Conclusion

The post-war II era was one of political instability which was the main cause of the failure of the government's development programmes. The colonial government's development plans were a failure because the nationalists were using the people, especially the peasants and the workers as a strong force behind them to achieve political independence within the shortest possible time. The series of industrial strikes, trade boycott and political conflicts between fashion groups were all signs of disharmony in the society for any sound economic plans to be made and implemented. The civil service which was to see to the effectiveness of the development programmes was placed in an insecure position of serving two "masters". It was to satisfy the wishes of the out-going colonial rulers as well as the interests of the national leaders. For the fear that when the nationalists took over the political power (the possibility was clear from the events of the time) the new leaders could influence the civil service structure, the civil servants adhered more to the wishes of the nationalists than the colonial rulers. Since the development programmes were in conflict with the wishes of the nationalist leaders it was likely that the programmes would not be carried out effectively.

When the nationalists came into power, their own development programmes came to be heavily influenced by politics. The top civil servants who were resisting changes in the colonial set-up were replaced. In doing so the politicians could claim the entire control of the civil service in order to get their wishes through. This was not the only cause of the failure of the various development programmes. The main cause was due to the refusal to take into consideration the viability of the projects and the technical advice involved in connection with their operation. All the development plans failed because of political influences and corrupt practices which characterised the development strategy of the country.

Table 20

PUBLIC EXTERNAL DEBT AS AT 12TH JANUARY, 1971

		(US $ Million)
A.	Long-Term Debt	231.00
B.	Medium-Term Debt ...	371.00
	of which: interest	77.00
C.	Short-Term Debt	286.26
	1. Arrears on Import Payment	66.96
	2. Unmatured 180-day Credits	138.82
	3. Arrears on Service Payments	80.48
		888.26

Source: Ghana Commercial Bank - As quoted in "Ghana Today" No. 1 - Self-Reliance - A Principle for the Development of Ghana - Ghana Publishing Corporation - Accra-Tema, Ghana - Attached Appendix.

References

1. Krassowski, Andrzej - "Development and Debt Trap" - p 5.
2. See The Ministry of Finance Report of 1959.
3. See Wills, J.B. (ed.) - "Agriculture and Land Use in Ghana - op.cit. - p 5.
4. Ibid - p 6.
5. See Nigeria Economic Council, - 1959 - Economic Survey of Nigeria - 1959 - Lagos - Federal Government Printer.
6. Krassowski, Andrzej - op.cit. p 5.
7. Letter to London Times - As quoted in Nigerian Daily Express - April 24th 1965.
8. Nkrumah, Kwame - "I Speak of Freedom" - 1961 - p 105.
9. Nkrumah, Kwame - "Africa Must Unite" - p 106.
10. Nkrumah, Kwame - "Axioms" - pp 42-43.
11. Paauw, D.S. and Fei, J.C.H. - "The Transition in Open Dualistic Economics" - p 34.
12. Nkrumah, Kwame - "Dark Days in Ghana" - pp 71-72.
13. Ibid - p 78.
14. Dennis, Austin and Rathbone, Richard - "Ghana" - in Africa Handbook - p 280.
15. CPP Political Rally Speech.

16. See Lewis, W.A. - "Industrialisation and the Gold Coast".
17. Nkrumah, Kwame - "Dark Days in Ghana" - op.cit. - p 80.
18. See Steel, W.F. - "Small-Scale Employment and Production in Developing Countries" - p 29.
19. See Botchway, F.A. - "Political Development and Social Change in Ghana" - p 140.
20. See The Ghana Seven-Year Development Plan - 1963/64 - 1969/79 - Accra.
21. See the State Farms Corporation, "First Bi-Annual Report" - Ministry of Agriculture - pp 2-3.
22. UGFCC - The General Secretary's Report - 1964-65 - p 6.
23. See Ghana Report of the Commission Appointed to Enquire into the Functions, Operation and Administration of the Workers Brigade - Minority Report and White Paper thereon - 1969.
24. See Young Farmers League Constitution, Aims and Objectives - Accra - 1965.
25. The present Author's own experience as Agricultural Assistant in Charge of District Mechanisation Services of the Ministry of Agriculture - Wenchi District in 1957.
26. Refer to the Speech quoted in 'Ghana' - Nkrumah's Autobiography - p 136.
27. See Krassowski, A. - op.cit. - p 55.
28. The Present Author disagrees with some with some writers' impression that were no spare parts for the tractors ordered.
29. Seidman, A.W. - "Ghana's Development Experience" - op.cit. - p 157.
30. The term of Office of this Regime ended in June, 1978, barely a year when it had made a major reshuffle in the Council which was re-named "the Supreme Military Council (SMC). In 1978 the Council replaced its Chairman and made preparation to return the country to civil rule; but barely two weeks to the time of general election a third Military Coup was staged to overthrow the SMC.

    The third Military Regime was known as "Armed Forces Revolutionary Council (AFRC). It handed over power to a civilian government (the 3rd Republic of Ghana) on 24th September, 1979.
31. Krassowski, A. - op.cit. - p 109.
32. Ibid - pp 109-110.
33. The NLC's first Budget Speech - July, 1966 as quoted in Ibid - p 111.
34. Interview by Col. I.K. Acheampong, Chairman NRC to Anthony Huges, Editor of Africa Magazine - Paris - April, 1972, as quoted in "news from Ghana" - Information Section - Embassy of Ghana - 13 Egebjerg Alle, Hellerup, Copenhagen, Denmark - p 1.
35. Ibid - p 5.
36. "News from Ghana" - Vol. 1/75 - January, 1975 - p 7.

37. Ibid - p 8.
38. The government White Paper on the "Outline of Ghana's Investment policy".
39. "Ghana To-day", No. 1 - Self Reliance - A principle for the development of Ghana - pp v-vi.
40. Ghana To-day - No. 1 - "Self-Reliance" - A principle for the development of Ghana - p 6.
41. Ibid - p 7.
42. Ghana Today - No. 10 - "Operation Feed Yourself" - p 4.
43. Ibid - p 5.
44. See News from Ghana - op.cit. - p 15.
45. 1970 Census of Agriculture as quoted in "Ghana To-day" - No. 10 - Operation Feed Yourself - op.cit. - p 15.
46. Ibid - p 14.
47. See Ibid - p 8.
48. See Ibid - p 8.
49. Culled from NRC Decree 140.

PART IV - GENERAL OBSTACLES TO LAND DEVELOPMENT

Chapter 9

BASIC AND TECHNICAL EDUCATION

9.1 Introduction

By early 1961, not less than 17 African States had achieved their political independence, thereby liberating over 150 million people from colonial rule. The rapid changes in the African political scene compelled some historians to describe 1960's as "the African Decade", or "the African era", in the 20th century world history. The struggle for independence did not end with that decade. Its achievements served as a target for other countries to strike at, and by 1980, the last and 50th colonial power had fallen on the African Continent. But what was the importance of the African historic era? The political independence would be examined in terms of African problems under African conditions and not necessarily in terms of the countries' past relations with the Western World. This had been the fundamental principle of African independence; in practice, however, many problems were involved.

The first problem which faced the newly independent African countries was the small size of trained leadership to guide the political and economic development which were taking place in these countries. The second problem was the low rate of literacy which accounted for lack of qualified personnel to take up the key positions in the important sectors of the economy such as Agriculture, Commerce and Industries.

Ghana which was the leading country in the African struggle for independence was no exception to these problems. The colonial government was aware of that and therefore, before the country's independence, it appointed a Committee to investigate the possibilities for higher education and to make recommendations. Consequently, in 1946, the Bradley Committee recommended the establishment of a university college in Ghana rather than a West African University in Nigeria. The reason the Committee gave was that the people considered it essential to provide themselves with a centre of higher education and learning for the training of their future leaders. They real-

ised how much the possession of a university college would mean to a young country determined to build its own future and secure political and economic foundations.[1] A higher level of education such as that of the university standard could be achieved through a careful and systematic education of the youths from the primary, middle and secondary school levels.

The impression in this chapter is that the Colonial Government did very little about the education of the country. The establishment of schools was mainly the initiative of the missionaries and Ghanaian private entreprenuers. Even so, since education was not free, the response to send children to school particularly in the rural areas was due to the system of land ownership in a particular area. This means that in areas where land activities brought good income for parents, there were tendencies for provision for schools. It was upon this criterion that schools which were first concentrated along the coastal areas, later extended to all the large towns in the country-side and finally in the villages.

9.2 The Growth of Educational System - 1940-1951

The impression about the educational system during the late decades of the colonial period was the inequalities in the provision of educational facilities. Philip Foster,[2] argues that such a condition existed because of the failure of the colonial government to impose controls upon the quality and quantity of educational provisions. According to him, there were in 1940, 472 Government/Grant-Aided and, 476 Non-Grant Aided Institutions with enrolment of 62,946 and 28,101 pupils respectively. In 1950, the Government/Grant-Aided was 1,621 and Non-Grant Aided was 1,378 institutions also with enrolment of 209,303 and 71,717 pupils respectively.[3] According to Foster's findings, there were unsuccessful attempts by the government to place all educational functions in the care of the local authorities on the British model. By 1940 the emoluments in Native Authority schools constituted less than 1 per cent of the national total.[4] The extent of the non-aided system was impressive. By 1950, the private schools, run largely by missions accounted for nearly half the total number of institutions and just over 25 per cent of the total enrolments. The non-assisted institutions operated in large numbers in spite of continual extension of grants-in-aid to new institutions.[5] In both systems, there was no effective control of the

schools. Until 1944, registration of schools was not required and there was no control of the activities of grant-aided institutions except for a series of minimal regulations. The number of schools totally financed and administered by government remained small.[6] Although there was an increase from 25 in 1940 to 48 in 1950 in the number of government educational establishments with total enrolment of 6,670 and 8,678 respectively, there was a drop in the percentage of the total national enrolment from 7.8 to 3.0. This could happen because government schools were unofficially restricted to the children whose parents were of high social standing and not necessarily on merit. Another reason could also be that the distribution of such schools was biased to only urban and sub-urban centres, more particularly in the towns along the coastal areas for secondary schools and only one to each district capital in the case of the primary schools.

There was a 'free market' in the establishment of schools. Thus, apart from the government, the missions or even private proprietors could enter the market in response to the demand for educational facilities in the districts. The government's presence in the market, served to stimulate the expansion of the private and missionary schools. During this period, the government was re-organising the farmers to expand their cocoa farms and improve the methods of cultivation. Several feeder roads were accesible to remote areas and the missions took the advantage of the roads to expand their schools; or where there was a need for a school but the missions had not established one, the government could establish one.

The missions were aware that if they did not act promptly the government was there to take action. They would not dare to miss the chance because it was through the expansion of school facilities that the evangelical work could spread rapidly in the rural areas. The establishment of schools tended to be competitive, not necessarily between the government and the missions but more keenly among the various missions. In areas where one particular mission arrived earlier to establish schools the Christian doctrine of that mission predominated. Hence, in Ghana it would be normal to see areas of predominatly Roman Catholic Christians and other areas with more Lutheran Church members. The government would not impose controls on expansion of schools because of the slow nature of growth in the secondary schools. In 1940 there were only 2 government secondary schools with total enrolment of 401 pupils. There were 3 Assisted with enrolment of 798 and 12 Non-Assisted with total enrolment of 1,436. In 1950 the number of government

secondary schools was still 2 with total enrolment of 857 pupils. The Assisted secondary schools had increased to 11 with corresponding increase in total enrolment to 1,919. The Non-Assisted secondary schools were 44 with enrolment of 3,386 pupils.[7] In eighteen private secondary institutions which existed in 1948, there were total staff of 167 but only 8 were trained teachers.[8] The rate of expansion of both primary and secondary education in the country was very slow until after 1945, but even during this period the improvement in the expansion was in the private proprietor group.

9.3 Provisions for Education - 1945-1955

The gradual increase in facilities for education were unevenly distributed. The majority of the schools that had been established by 1945 were mostly concentrated in the Southern part of the country in the regional and district capital towns with the Missions playing an important role. The government had to concentrate much more in the Northern Region because of the typical isolation of that Region.[9] The concentration was in the main towns. The rural areas in both the South and North were neglected partly due to poor communication network and partly due to the prejudice against the rural community that they were too poor to educate their children. The private proprietors would not establish schools in areas where there was no possibility for getting profit. Later when cash crop farming brought in much income to landowners they were able to educate their children and so the provisions of education were extended to the rural areas. This means that historically there was a close relationship between land ownership and provisions for education.

From 1945 onwards, there was a marked tendency for cocoa production to move from the pre-war areas of production.[10] The movement was caused by the population pressure on the land and high demand for forest areas for cocoa production. During the same period the soils in the forest areas in North Ashanti, Brong Ahafo and Afram Plains in the Kwahu District were found suitable for cocoa farming and so many of the farmers who had previously been forced out from production for lack of land or swollen shoot disease moved to these new areas. As the population increased in the areas, schools were established for the children of the farmers. With the income derived from the proceeds of the farms, parents could afford to pay for the costs of educating their children.

9.4 Development of Education - Post-Independence Period

In 1948, only 4 per cent of the population were educated. In 1960, the population had increased to 6.7 million and 21 per cent of it were educated.[11] By 1960, "27 per cent of the population over 6 years of age had attended school at some time. Of children in the 10-14 years of age range, 42.7% were attending school and a further 6.3% had at some stage attended it."[12] This achievement in 12 years and only 3 years after independence was the highest in Africa. It was the result of the government's post-independence policy of "compulsory fee-free education" for all children of school-going age.

Table 21

POPULATION EVER AT SCHOOL - 1948 and 1960

		1948	1960
(a)	Total Population (in thousands)	4,118	6,727
(b)	Number who have attended or are attending school (in thousands) (African Population only)	164	1,405
(c)	Percentage (b) forms of (a)	4.0	20.9

Source: A study of Contemporary Ghana - Vol. II - op.cit. p 48.

The percentage for males, aged between 10-14 who had been to school was 60.3; and those who were still attending school was 54. In the capital city of Accra alone, the males, 10-14 years old who had been to school at some time were 78.8 per cent and in the same age-group those who were attending school were 74.9 per cent.[13] By 1960, three-quarters of a million Ghanaians, of whom two-thirds were males and one-third females, were receiving full-time education. This represented 11 per cent of the population of the whole country and in size was over two-fifths as large as the male labour force, measured in terms of the number of males, 15-64 years of age.[14]

The 1960 population census gave the impression of past education and the distribution of skilled occupations in the regions as per table 22.

Table 22

Regional Distribution of Selected Skills - 1960

Percentages

Region	Higher Education	Directors & Managers	Book-Keepers Accountants & Cashiers	Mechanists	Electricians	Drivers
Accra CD	34.1	59.5	58.3	21.2	34.2	18.4
Western	20.5	17.3	14.4	29.3	29.6	23.0
Eastern	12.9	6.1	5.4	12.1	10.5	18.4
Volta	8.5	2.8	3.1	6.9	2.6	7.7
Ashanti	16.2	20.6	13.8	23.0	18.9	21.7
Brong/ Ahafo	3.4	-	2.3	3.5	2.8	6.4
Northern	4.3	1.4	2.8	4.0	1.5	4.4
All Regions	100.0	100.0	100.0	100.0	100.0	100.0

Source: 1960 Population Census Advance Report of Volumes III and IV" tables 21 & 43.

The main reason for the concentration of the human capital of Ghana in Accra Capital District, Western, Ashanti and Eastern Regions was due to the degree of urbanisation in these regions. Eighty-one per cent of the urban population of Ghana, defined in the census as "population of localities having more than 5,000 residents", was concentrated in these four regions. This showed that human capital (the accumulation of education and new skills) was either formed in urban centres or attracted to them. The case of Accra CD alone was interesting. The census figures showed that in 1960 only 25 per cent of the total urban population of Ghana lived there, but it contained 34 per cent of persons who had attended institutions of further education, 52 per cent of the Directors and Managers, 58 per cent of the Book-Keepers, Accountants and Cashiers. In Accra Area, the concentration of human capital was much less in respect of technical skills, mechanics and drivers although the percentage of electricians in all the four regions was about equal to that of all people with higher education. The role that Accra played as the seat of the governmend and the main centre of commercial, cultural and social life of the country was another factor in its high share of the concentration of human capital.

The Volta, Brong Ahafo, and the Northern Regions had a very low percentage share of the resources for human capital, particularly in respect to drivers, who had a skill widely diffused in the economy. The share of the three Regions was only 19 per cent of the total. The reason could be attributed to the high involvement of the people in the regions in the cash crop (mainly cocoa) production though in the Northern Region cocoa production was completely absent it was the main source of supply of migrant labour to the cocoa areas. Apart from cocoa production, no important trade took place in both Brong Ahafo and Volta Regions and therefore the low percentage share of the two regions for human capital would not be unusual. There was a tendency even for the natives who were professionals and artisans in these two regions to drift to the cities where their services could fetch them higher income.

The major changes in educational system began in 1951 with the Accelerated Development Plan in education before the full independence was granted in 1957. The Ghana Educational Trust (G.E.T.) was formed in December, 1955. This was five years after the introduction of the Accelerated Development Plan in Education which had resulted in an unprecedented increase in the number of potential entrants to secondary schools. "The number of pupils in primary schools had risen from 338,000 in 1952-53 to 492,000 in 1955, and in Middle Schools from 92,000 to 114,000. For these numbers there were only 30 Government and Approved Secondary Schools and 28 Private ones in 1955, with a total enrolment of about 10,000. The Government therefore decided to increase the number of secondary schools, and the G.E.T. was formed and given freedom from civil service administrative red tape and bureaucracy, to do this in the shortest possible time."[15]

One of the major changes that took place under the Accelerated Development Plan in education was the enactment of Education Act in 1961 to replace the Education Act of 1925 (for the Colony and Ashanti) and the Education Ordinance of 1927 for the Northern Territories (now Northern and Upper Regions). Under the new Act legal effect was given to compulsory fee-free primary and middle school education also introduced during the same year.[16] Under the Plan a strong public campaign appealing to all parents and guardians to send their children to school was launched throughout the country. Public response to the campaign was impressive but later it was realised that in view of large number of children in family units, many parents were financially weak and could not afford to send all their

children to school as the government expected. The government introduced a system of fee-free compulsory education in September, 1961. Every child of school-going age (6 yrs.) was to attend school. There were immediate problems with this policy. First, there were not enough classrooms in many areas for the children and therefore a shift system whereby one group of children used the classrooms for 4 1/2 hours in the morning and another group 4 1/2 hours in the afternoon was introduced. By the plan, "enrolment in the public schools alone shot up by about 120 per cent in 1962, and to provide accommodation for the sudden phenomenal growth; about 2,500 primary schools and 374 middle schools had to be opened in 1962".[17] Secondly, there was a problem of provision for trained teachers with the sudden increase in enrolment of pupils. This problem was, however solved later. "By 1965 the number of training colleges had risen from 31 in 1961 to 84."[18] A third problem was the supply of free text books to pupils. A compulsory fee-free education would loose its meaning if parents were told to buy their childrens' text books. Hence under the plan, the government made provisions to supply free text books to primary and middle schools.

The increase in number, both of pupils and establishments of primary and secondary schools meant that there was a corresponding demand for trained teachers. One important development during the post-Independance period to improve the quality of education was the establishment of the Cape Coast University in 1962. The large increase in the number of public secondary schools as a result of the operation of the Ghana Education Trust and the consequent expansion of sixth form classes in secondary schools had meant that large numbers of students were now available to enter the universities by 1960. At the same time there were not enough Ghanaian graduate teachers to teach in the secondary schools and the teacher training colleges. The country was depending heavily on expatriate staff. It was primarily to meet this pressing demand for graduate teachers in the secondary schools and training colleges that the Cape Coast University was established. Students studied for either the Bachelor of Arts (B.A.) and Bachelor of Science (B.Sc.) degrees or B.A. (Education) B.Sc. (Education) degrees. Those opting for the latter followed a three-year course in education and two Arts subjects or two science subjects. In 1975, the University began to run post-graduate courses and a Medical School was also established to train medical students. In addition to the University the development of Teacher Training was spectacular. The Teacher Training Colleges increased from 30 in 1957 to 83 in 1967, and their enrolment from 2,720 to 4,010.

There were tremendous strides in the basic education during the first decade after the country's independence. (See Table 24.)

Table 23

Development of Basic Education - 1957-67

Type	Year	No. of Establmt.	Enrolment	Year	No. of Establmt.	Enrolment
Approved Prim. Schs	1957	3372	455,749	1967	7,913	1,116,843
Mid. Schools	1957	931	115,831	1967	2,346	280,866
Public Sec. Schools	1957	38	9,860	1967	103	42,276

Source: Compiled from S.D. Nimako - "Education in Ghana - 1930-1974 - in Ghana Today No. 9 - Ghana Publishing Corporation - Accra/Tema - Ghana - p 20.

From the early period up to 1966, all the commercial colleges in the country were established, owned and managed by private people but commercial education was included in the curriculumn of the technical institutes. After the 1966 coup, the military government took over thirteen commercial schools and business colleges which were offering commercial and business education at post-middle school level from their private proprietors and integrated them into the public education system. The military government's policy was not to disturb but rather to encourage private enterprises and so the action came as a surprise. No reason was given to the government's action but it could not be on grounds of mismanagement or inefficiency since it was the best commercial institutions in the country that were taken over. Through strong protest and petitions by the proprietors, four of the colleges taken over had reverted to their private owners by 1967.

The nine remained in the public system. All the commercial and business colleges in the country offer a five-year course of commercial and business cum secondary education leading to the Ghana Business Certificate.

9.5 Technical Education

Technical education was an area where much was not done during the pre-independence period. In the colonial days, science subjects were not taught in many of the secondary schools or training colleges and the usual explana-

tion was that there were no laboratory facilities for teaching science subjects. While in all the secondary schools it was compulsory for pupils to learn the English language, English literature, European history and religion (Christianity), there were no science subjects which were compulsory and even the teaching of science was purely theoretical. There were slight developments in technical education during the first decade after independence. The number of technical schools increased from 8 in 1957 to 11 in 1967, and their enrolment from 2,720 to 4,010.[19]

In view of our interest in agricultural development it is necessary to look at the historical background of the development of Agricultural Education in the country. Agricultural education was nearly non-existent during most part of the colonial period. We may be inclined to say that the present underdevelopment of agriculture (especially in the sectors where high technical skill is required) in the country is the result of late introduction of Agricultural Education during the colonial era.

The first combined Agricultural and Forestry Training School was established in 1922. In 1924, Messrs Cadbury Brothers of Bourneville provided accommodation and training facilities for the students but following the outbreak of the war in 1939 the "Cadbury Hall" was closed down. It was later reopened after the war. Since the in-take of students and training facilities were small a complete new site for Agricultural Training Centre was established at Kwadaso near Kumasi in 1946. About the same time, the Forestry Training School was also established at Sunyani in Brong Ahafo. From 1946 to 1958 a total of 264 students passed out as Agricultural Assistants from the Agricultural Training Centre at Kwadaso.[20]

In 1945, another Agricultural Training School was established at Tamale to train leaners for the Northern Region. From 1946-1958 only 71 leaners passed out. Out of this number, 57 were appointed by the local Authority and the rest by the Department of Agriculture.[21]

The University of Ghana turned out 56 graduate students in Agriculture in 1951 and in the University of Science and Technology 35 graduate and diploma students in agriculture completed their courses in 1952.[22]

After Independence, Ghana trained a large number of its technicians overseas, as part of the United Nations (UN) Programme which assisted all the new states which attained independence after the Second World War. (UN)

Expanded Programme of Technical Assistance (EPTA). As early as in 1960, the United Nations had adopted a resolution according to which the industrialised countries should reach by 1970 - at the end of the UN Development Decade - a target of 1% of their national products for development aid and capital transfers to developing countries.[23] By following this declaration a number of industrialized countries, East and Western Europe, United States of America, extended their technical aid programmes to Ghana to train its technicians abroad.[24]

It has been a long tradition in Ghana that Agricultural Trainees are employed by the Government or Local Council Authorities on completion of their courses. The trained Agriculturalists do not become farmers.

9.6. Conclusion

As we stated earlier on in this chapter, the economic backwardness of Ghana was primarily due to the late development of education. For the whole colonial period the teaching of science in primary and secondary schools was nearly non-existent. Even the few primary and secondary schools in the country were established as a matter of necessity by the colonial rulers to get interpreters through whom they could communicate to the chiefs and the people for administrative purposes only. It was not the aim of the colonial government to educate the natives in a way that they could in future develop the country themselves. In this respect, had it not been the language barrier between the colonial administrators and the natives, the former would not have established schools at all.

After the war, when the struggle for independence resumed, Watson Commission[25] was appointed to investigate and among other things, to assess the educational standards of the people prior to any recommendation for independence. The Commission's report indicated that only 3% of the population could read and right. By 1948 the Colonial Government had officially ruled the country for 104 years (1844-1948). It must be remembered that under the Bond of 1844 which restored the colonial power, education was one of the priorities in the development.

There is no theory which establishes that education of a country has nothing to contribute to its economic development. In fact, in agriculture as in other sectors the general impression is that growth will depend to a large

extent on additional supplies of new and improved factors of production. Schultz[26] suggests and we agree with him that, "in general, where technically superior factors of production are a principal course of agricultural growth education intended for the acquisition of skills to use those new factors to an advantage becomes decisive". In this respect, the Colonial Government's policy of slow development of education was one of the main obstacles to agricultural development in Ghana.

The contribution of the system of ownership of land was by means of the farm income which helped farmers to educate their children. In the colonial days when even family sizes were small, only few parents could educate their children. This was partly due to the poor provision and cost of education of children. The provision for education was poor because most areas had not been opened up for farming. From about 1950 onwards when the land ownership system allowed a greater part of new lands to be cultivated in the remote rural areas it was necessary to establish schools for the growing rural population. The farmers earned substantial income from the proceeds of their farms and could send children to school. The Government's new policy of compulsory fee-free education was possible because of the national income derived mainly from the cash crops produced by the farmers. Since the policy of free education relieved the farmers of the burden of bearing the cost of their children's education, they could invest more in procuring land to expand farms to meet the labour costs. This could be one of the causes of high output of cocoa in the sixties. The major development projects including education were financed by the government from the income derived from the cash crop and so it would be right to say that it was the system of land ownership that made the economic development possible. In this respect, if technical education, in particular had been introduced earlier by the Colonial Government it would have removed several of the obstacles to agricultural development.

References

1. This was the main impression of the Report of the Bradley Committe on Higher Education - 1946.
2. See Foster Philip - "Education and Social Change in Ghana" - p 113.
3. Ibid - p 113.
4. Ibid - p 113.

5. The Ordinance which was in force prior to world war II was the Ordinance of 1887 and its successor of 1925. Both Ordinances stated clearly that it was not the intention of the Colonial Government to establish a highly centralized educational structure nor to effectively control the curricula of schools.
6. Foster, Philip - op.cit. - p 114.
7. Ibid - p 115.
8. See Gold Coast Legislative Council debates - 1948 - No. 3 - p 43.
9. It is said that during the early part of this century the missionaries were unable to expand their school activities to the North because of the hostilities of the Ashantis.
10. The production of cocoa was concentrated in Akim, Akwapim and South-eastern Ashanti Areas during the pre-war period.
11. See 1948 and 1960 population censuses.
12. A Study of Contemporary Ghana - Vol. II - op.cit. - p 49.
13. Ibid - p 48.
14. Ibid - p 48.
15. Education Statistics, 1957 - As quoted by Nimako - "Education in Ghana - 1930-1974 - in "Ghana Today" - No. 9 - pp 14-15.
16. Ibid - p 16.
17. Ibid - p 17.
18. Ibid - p 17.
19. Ibid - p 21.
20. See "The Ghana Farmer" - Vol. II No. 1 - February, 1958 - p 24.
21. See "The Ghana Farmer" - Vol. II - No. 3, August, 1958 - p 88.
22. See "The Progress Report on USAID Activities in Ghana [...] December 10-15 - 1962 - p 8.
23. See the Lecture delivered by F. Teicher% - Principal, Nordic Agricultural College, Odense/Denmark at a Seminar at Legon, University of Ghana on 17th September, 1968.
24. The present Author was a recipient of the Danish Government's Technical Aid Programme Award in Agriculture from 1965-1967 in Denmark.
25. See Watson Commission's Report - 1948.
26. See Schultz, T.W. - "Transforming Traditional Agriculture".

Chapter 10

AGRICULTURAL CREDIT FACILITIES

10.1 Introduction

Agricultural credit has been one of the serious problems of Agricultural Development in Ghana. Suggestions for solution of the problem and improvement of the credit system began during the early part of this century. For instance, "in March, 1918 the chiefs of Eastern Region petitioned the government to institute an Agricultural Bank"[1] from which the farmers could obtain credit for improvement of their farms; but the petition was turned down. Later in 1925, the Africans once again raised the question of farm credit. This time the government referred the matter to the Agriculture and Commerce Society. The society recommended a type of co-operative credit as a suitable system for the farmers. It was no wonder that when the co-operative ordinance was passed in 1931, it emphasised the need of a good agricultural bank to be based on the farmers' co-operative societies.

At the time when the government was being petitioned to introduce bank credit system, the price of cocoa was substantially high and when in need of money, the farmers could easily obtain credit from the local money-lenders and repay after the next harvest. In 1931, the trade depression began with a sudden fall in price of cocoa. The farmers were placed in a difficult situation as they could no longer obtain loans by counting on the yields from their farms. Many of them became indebted as a result of the depression. The government passed the co-operative ordinance of 1931 for the provision of constitution and regulation of co-operative societies. Several reports from experts and commissions confirmed the farmers' increasing indbtedness as a result of the depression and the high rate of interest charged by the local money-lenders. The reports contained several recommendations to promote co-operative thrift and credit societies but the government did not pay any heed to the recommendations which contained valuable suggestions. For example, the Manager of the Accra Branch of the Bank of British West Africa commenting on Nowell Commission Report said that, "his bank had in the past thirty years submitted to the Colonial Office proposals for the establishment of an Agricultural Mortgage Bank in West Africa. The project had had to be abandoned because of the abscence of

land registration, and the legal inability of the African to convey more than a leasehold title to a non-African".[2]

Truly, insecurity of landownership is one of the factors which makes it difficult for the peasant farmers to get agricultural credit. The small peasants' need for farm credit has been historically demonstrated; loans which were obtained from local money lenders, were of high interest rates, but because of financial needs the farmers were compelled to take them. This fact alone is sufficient to give the impression that if these small-scale peasant producers (the highest number of all the farm productive forces) could be given the adequate and fair terms of credit they would be able to raise production to the level required, at least, to feed the population. Unfortunately, the farm credit mechanism seeks to reject these active producers basically on grounds of policies and rigid conditions of getting loans. "This state of affairs resulted in Ghana importing about N¢ 40 million worth of food items in 1965."[3] The importation of food became necessary because of the rising food prices during the previous years. In statistical studies carried out in 1963, "the consumer price index has risen by about 48 per cent in the urban areas and 52 per cent in the rural areas, with a national average increase of about 51 per cent. [...] The studies further demonstrated that local food has become relatively the most expensive commodity both in the urban and rural areas and consequently on the national scale; and that more than three-quarters of the increase in the national consumer price index is due to the increase in both local and imported food prices".[4] One of the main causes of Ghana's inability to produce enough at home include lack of agricultural credit facilities to the small peasant farmers to enable them to employ labour more effectively, buy fertilizers, improved seeds and farm equipment, etc. The large-scale public organisations which received grants of huge sums of money never performed well in view of political influences. The "big" farmers (landlords) too, who were found credit-worthy and were given loans were not productive owing to their interests in adventitious income (defined here as income that may accrue to a landowner apart from his use of the land.; examples are trading building contracts, transport services, etc.)

The financial institutions are reluctant to grant farm credit to the small farmers in the same magnitude as the "big" farmers because the former are not found credit-worthy and there are higher degree of risks involved in their farm projects. Our assumption in this chapter is that lack of adequate

credit facilities to farmers is a hindrance to agricultural development as well as an obstacle in the process of transformation from traditional to modern agriculture.

10.2 Types of Agricultural Credit

Any loan, either in cash or in kind, granted purposely for investment in a farm enterprise (purchase or hire of land, machinery, fertilizer, etc.) irrespective of the conditions upon which is granted is considered[93] Agricultural Credit. What is important of such a credit is that it must provide either development or working fund or the combination of the two to form the fixed or running capital of the farm enterprise.

The development capital may be used partly for the initial acquisition of land for farming purposes and partly to help buy essential farm inputs which have a longer duration of use on the farm as a means of production. When a credit is granted to a farmer to enable him to construct a dam, build a farm house, or buy a tractor and implements, it is termed as development capital or credit. The items which such a credit helps to buy are not consumed readily within only one or two production cycles. The development capital credit is therefore, generally repaid out of profits spread over a number of years. The period between the time this kind of credit is granted to the expected time of repayment, is called, "amortisation period", which is usually fixed according to the useful life of the farm asset in question.

The working capital credit consists of funds granted to the farmer to enable him to meet current expenses, mainly wages or salaries of his employees or other overhead costs -fertilizers, pesticides, etc. Unlike the development capital credit, a working capital credit is usually consumed during a production cycle. A working capital credit is therefore granted on a short-term basis; usually not exceeding a period of 18 months or to be repaid after the sale of the farm produce concerned.

In farm accounting, it is necessary to distinguish between development expenditure and working costs. The former may entail depreciations and therefore include maintenance costs while the latter has residual effects on production (diminishing returns as a result of constant application of fertilizer or more additions of workers to a particular piece of land). The common feature of the two capital credits is that they are both repaid

from profits on the farm. The local money-lenders do not distinguish between development and working capital credit when they grant loans to farmers. Because the amortisation period of credit from these sources are the same, borrowers find it practically difficult to repay the loan and this is one of the main causes of farm indebtedness in Southern Ghana. The sources of credit are many but may be classified into two main groups. They are Non-institutional, and Institutional credit.

10.3 Non-Institutional System of Agricultural Credit

These sources of credit include those from friends or relatives in the form of gifts, loans usually with little or no interest charges. Another class of non-institutional farm credit is those provided by the local money-lenders. The rate of interest charged on such loans are usually very high; sometimes 100% or more with rigid conditions for security of immovable properties (farms, buildings, etc.) or very expensive precious metals (jewellery) or Kente cloths (Ghanaian National Costumes). The constraints that the operation of local money-lenders impose on peasant farmers are well known. Several writers have expressed concern about the attitude of these creditors and claim that their operation has been responsible for the persistence of widespread indebtedness in agriculture.[5]

As early as 1930s, it became evident that the majority of the cocoa farmers were not only indebted but had also pledged their farms to local money-lenders whose rates of interest were very high. Shephard[6] remarked that, "enquiries suggest that unless redemption is automatic few farmers can clear themselves of their rapidly increasing indebtedness". Polly Hill[7] summariese the findings of Beckett and Shephard as follows:

> "About one third of all farms were found to have pledged one or more of their farms. Prof. Shephard added that three quarters of all farmers had pledged a portion of their (cocoa) crop [...].
>
> Becket said that 9 per cent of all farmers had pledged all their farms, (but) Prof. Shephard put the figure at 5%. Prof. Shephard quoted figures for 93 farmers showing that 34 had borrowed for the vague purposes of farming; 26 for funeral expenses, 15 for marriage expenses, 14 for litigation expenses and 4 for paying fine."

All these writers agree on the point of the presence of farm indebtedness and pledging of farms for borrowed money from local money-lenders; there is little evidence, however, in support of the fact that the credit the farmers received was actually used for agricultural investment. We assume that, in many cases, the money borrowed was consumption credit; that is, for the purposes of family maintenance, litigation, funeral celebrations or festivities and not for farm investment. The inter-war years was a period of economic recession when the motive for family support and perhaps litigation

(disputes about farm boundaries, extortionist practices, etc.) could be stronger. "Land boundaries were formerly determined in a causal manner, their precise location being of little consequence while the population was small and land abundant."[8] As population increased, litigations associated themselves with land ownership. Actions were taken against cultivators of land after long period of undisturbed possession. A farmer might acquire, in good faith, the right to cultivate a piece of land only to discover that to retain it for development he would pay a huge sum of money to a second owner. There had been difficulties in determining whether the right was held by an individual or by a family, and in the latter case, which members could legally give a conveyance.

The widest sources of farm credit had been the traditional type obtained from the private money lenders. Most lenders lived in the same farming community with the farmers and therefore were conversant with each farmer's activities and financial problems. Great risks were attached to the granting of loans but private money lenders had certain conditions upon which they sought to reduce the risks before the loans were granted. For example, a farmer who wanted to obtain a loan from a lender had to pledge his cocoa farm as a security for the required loan. The money-lender took possession of the farm and harvested the crops, until the debt was paid. "The impression gained from a field survey in 1957, tended to suggest that, by and large, three quarters of the farmers of Southern Ghana and Ashanti are indebted in one form or another."[9]

Agricultural indebtedness tended to be higher among farmers in the cocoa producing areas than among those in non-cocoa cultivation districts and virtually non-existent in Northern Ghana. According to La Anyane,[10] money lenders who were in all parts of the country except Northern Region, comprised of Ghanaians, Nigerians and Lebanese or Syrians.

After the Second World War, no better credit institution was established in the country. The farmers' indebtedness increased so terribly that most farms were in the hands of local money-lenders. The officially known and recognised form of farm credit was the co-operative type which members raised through thrift practices. Within the co-operative credit system, several societies were financially weak to satisfy the credit demands of their members. For those societies which started well in granting of loans, repayment did not go on smoothly to strengthen future credit opportunities.

The co-operative credit system was efficient in granting loans but not all local farmers held society membership and it was difficult for non-society members to receive credit. These conditions helped to strengthen the position of and the need for the local money-lenders, though their financial operations were forbidden in several districts.

The war-time market conditions aggravated the problem of farmers indebtedness. The falling prices of agricultural produce meant that the farmer no longer produced all he consumed nor consumed all of the little he produced. His welfare and that of the entire family depended on the type of money economy in which his income was not evenly spread throughout the year round. It was concentrated in short periods; probably lasting from October to January. The family expenditure always ranked heaviest during this short period. Practically, most of the food requirements would be produced during this peak season and sufficient of them saved for future consumption during the slack season. Several items on the expenditure list could be of emergency type, outside the question of food and would call for borrowing of money.

In view of their extortionist tendencies, the local money-lenders have since the early period, lived unpopularly in the midst of the general public and the government. Attempts have been made, with little results, to regulate or terminate their financial activities completely.

In 1945 the toll of farm indebtedness was so high that the government's attention was drawn to Sir Andrew Jone's memorandum on agricultural indebtedness. The memorandum suggested that "the method of relief was to appropriate some parts of the cocoa profits made by the West African Produce Control Board and to set up Boards to examine all applications for financial assistance".[11] Following the memorandum, the Governor appointed the Puckridge Committee in December, 1945, with the following terms of reference:

"(a) To consider the need of cocoa farmer for short-term agricultural credit facilities at low interest rates, and to make recommendations;

(b) To consider whether any special machinery should be set up to provide for the just settlement of existing and unduly onerous debts incurred by the cocoa farmer, and to make recommendations."[12]

In August, 1946, the Committee submitted its report with valuable suggestions. First, it agreed that a provision of credit facilities for farmers was necessary but it required the enactment of a suitable legislation to empower an organisation to be established and operated with a provision of capital for the purpose. Secondly, the Committee recommended, as a matter of urgency, that it was necessary for the provision of long-term credit for establishment of new cocoa areas and for rehabilitation of suitable swollen shoot disease controlled areas. Thirdly, it believed "[...] that the provision of long-term credit facilities is essential, and that provision of such facilities is dependent upon the introduction of a system of registration of titles to land, and the Committee therefore desires to draw attention to the necessity for the early introduction of a scheme to survey and define the boundaries of all cocoa farms in the Gold Coast".[13]

After the Committee's report the government did not make it clear whether it had accepted the recommendations and was going to implement them. Instead, several[14] other Committees were appointed to investigate the same farmers' indebtedness and credit problems. While the Committees agreed that a better credit system was urgently needed as relief to farmers from their indebtedness, others felt it was short-term and not long-term seasonal loans that were necessary.

The impact of farm indebtedness and pledging of farms was felt as a change of ownership of land. Whenever a farm was pledged for credit, the money-lender assumed the role of ownership of the farm until the borrower re-paid the amount and the interest thereon. In several cases, the borrower was tied up by his labour-services on the pledged farm on share-crop agreement (Abusa) in which the borrower received one-third share and the lender, two-thirds share until the debt was settled. By means of indebtedness and pledging of farms, the majority of the original landowners were turned into a class of tenants by money-lenders for whom they toiled for a bare minimum of subsistence. The debtor-landowners would be compelled by the circumstances to join the tenant class or form a new class of quasi-landless (landowners who are evicted from their lands as a result of debt) outside their own holdings. Thus in rural society, particularly in the cocoa areas there are principally three classes of people - the landowners ("big" and small), the landless and the quasi-landless.

The main objective of the government in respect of farm credit has been to

help clear the increasing indebtedness of the farmers. One of the approaches to the problem is to take measures to eliminate the local money-lenders by persuading the farmers to join a co-operative organisation. In doing so, the farmers will be able to obtain credit on a co-operative basis for group production and bulk marketing of their produce. Another measure has been the introduction of institutional credit by which the farmers can finance their farm projects to increase production.

10.4 Institutional Credit

Among the trend of post-war II changes in the agricultural sector of the economy was the establishment of the first Agricultural Bank in the country. Judging from the numerous petitions and calls previously made by prominent persons on behalf of the farmers and sometimes by the farmers themselves, the set up of the bank was long over due. It could be that the government's long silence over the matter was partly due to the problems associated with land titles. By this time, the system of land ownership had not significantly changed, but the increased economic activities[15] such as the re-commencement of the cocoa industry, the discovery of valuable minerals and forest products, had given a new impetus to land boundaries and titles to the extent that they no longer posed threats to the main objectives for establishing an Agricultural Credit Bank in the country.

In 1948, the Agricultural Bank Ordinance (of 1948) was passed. It was to establish an Agricultural Bank which would make provision for the relief of farmers indebtedness in Southern Ghana and Ashanti. The provisions of the Ordinance was not implemented and no Agricultural Bank was established nor any tangible reason given for not establishing it. The historical importance of the Ordinance was that it signalled that the time had come for establishment of such a credit institution.

In 1950 another Ordinance was passed for the establishment of an Agricultural Loans Board (ALB). Upon this Ordinance, proper action was taken for establishment and management of a Loans Board to mainly grant loans to Ghana farmers. It was specified in the Ordinance that the farmers' applications for loans should be indicated whehter they were purposely for cocoa development or for other crop establishment. The loans intended for the development of cocoa were to be considered and provided solely by the Cocoa Marketing Board and those for other crops were to be considered on a

regional basis by the newly established Agricultural Loans Board.

In order that the Agricultural Loans Board could carry out its function it was provided, in 1952, with the sum of £ 250,000 borrowed from government funds at the rate of 2 1/2% interest per annum for a period of twenty years. Later the government gave the Board additional grants of £ 30,000 in 1952 and further £ 30,000 in 1953.

In 1953 the Cocoa Purchasing Company was established to take over all the responsibilities of the Agricultural Loans Board. No official reason was given but even if the ALB had been found inefficient the CMB would have been the alternative organisation to take up the responsibilities, though the CMB could not undertake the business of making loans to farmers without a prior revision both of its constitution under the Ordinance and its organisation. The CMB was not primarily established to have direct contact with the farmer and perhaps that was the reason for setting up the CPC.

The CPC commenced to grant loans to the farmers in 1953, the same year it was established. The loans went to the cocoa farmers only since the funds were supplied by the CMB. It appeared that cocoa farmers' applications for loans received earlier attention and went through quicker than those of non-cocoa farmers.

The CPC's system of granting loans to cocoa farmers had so far been considered to be the worst in the history of Agricultural Credit systems in the country. "Out of 22,176 applications for loans involving £ 6,582,461 received by the CPC, 13,002 loans were made amounting to a total of £ 3,227,845. The rate of interest charged was 10 per cent. By 1957, only 128 of the loans made had been entirely repaid, and the total reclaimed in this connection was £ 41,225. Over £ 3 million was owed by farmers in 1957.[16]

The Jibowu Commission was appointed to enquire into the management and administration of the CPC from the time of its inception of office to 30th April, 1956, in relation to the manner the company granted loans to farmers, etc. and to make recommendations. The Commission reported that:

"(a) There had been political interferences with the company.

(b) Loans were given in excess of the authorised limit without

regard to the authorised procedure.

(c) Bribery, corruption, and extortion had been practised.

(d) Repayment of loans had fallen greatly into arrears.

(e) The accounting system was faulty.

(f) The staff of the company were inefficient, unqualified, and dishonest."[17]

The Commission did not recommend dissolution of the Company but called for a revision of the loans section. However, the government dissolved the Company. The problem of Agricultural Credit and farm indebtedness remained.

The impact of the system over the functions of subsequent credit institutions was twofold. Firstly, that they followed the patterns of the CPC where loans granted were not utilised for agricultural purposes and secondly, that probably the fears for non-payment of loans led to rigid conditions which the small farmers, in particular, could not fulfil and therefore were deprived of getting loans.

The most important sources of institutional farm credit since independence are the co-operative (producing and marketing), the Commercial Banks (Barclays Bank, Ghana Commercial Bank, the Standard Bank of West Africa Ltd.), the Development Banks comprising of the Agricultural Development Bank (ADB) and the National Investment Bnak (NIB).

(a) Co-operative Credit

The historic impressions about Co-operative Marketing Associations, at least up to about 1936 showed promise for their system. The members repaid their loans promptly and fully. The problems in payment of loans began in about 1937 mainly due to falling prices of the product and the "Cocoa Hold-Up". By the end of the crises several societies had been completely paralyzed to be able to finance their members. Others attempted to re-organise farm credit for their members. The central society of the Volta Region, for example, established in 1938 the first ever co-operative Bank in British West Africa at Kpeve. After the Second World War the paid-up share capital of all the societies in 1951/52 stood at £ 320,000; and by the end of March 1952 the government was so pleased with the performance and the co-operative efforts that it granted an interest-free loan of £ 100,000 to the society.[18]

The achievements came principally as a result of financing marketing activities. In 1944/45 a national Co-operative Bank was established. It was decided later to expand the area of activities of the co-operative organisation and therefore became clear that the co-operative Bank alone was not enough to deal with farm credit. In 1946 a Committee was appointed to examine and report on the need for agricultural credit facilities. The functions and activities of the credit institutions which emerged as a result of the Committee's recommendations have been discussed in Chapter 10.

On the whole, the performances of co-operative organisation in the country has been disappointing. It is because co-operatives are formed and financed by the government as a means of improving farmers' conditions. It is not the farmers who willingly form co-operatives; hence the government's control and direction of co-operatives in the country. The control of the activities of societies had made it impossible for the farmers to take any initiative in organising themselves.[19] The tendency has since been that political pressure has to be exerted on farmers to show willingness in joining co-operative societies. Owing to political interference, capital formation within co-operative societies has been the responsibility of the government and not through members' contribution to the share-capital. The post-independence political interferences in the affairs of the co-operative organisations replaced the co-operative principle of "self-help" with "lip-service" for the party in power to the extent that the co-operative movement existed only by name.

(b) Commercial Banks

The first group of Banks, namely the Commercial Banks may normally confine themselves to the provision of working capital while the Development Banks may generally specialise in financing development capital. As far as the farm credit is concerned, the Commercial Banks may account for about only 10 per cent of the total deposits. This is not sufficient in terms of the role agriculture plays in the economy and the need to step up farm production. But it is clear that the Commercial Banks are not interested in Agricultural financing, perhaps due to the unusually high rate of risks involved in the country's farm enterprises. The government has recognized the credit gap and has accordingly estab-

lished two specialised institutions, the Agricultural Development Bank (ADB) and the National Investment Bank (NIB) to assist in the provision of farm credit. The ADB in which we are particularly interested, is to cater for the provision of supervised rural credit system essential to increase agricultural production at an accepted rate of 5% per annum at the minimum.[20] The NIB grants loans for industrial and/or Agricultural or Agro-based industrial projects.

The ADB was established by an Act of Parliament in 1965 with the following objectives:

"(i) to fill the serious gap in our institutional financial structure as a result of which agriculture was starved of credit facilities.

(ii) to create a specialised financial institution to cater for agriculture and its allied industries such as forestry, fishing, animal husbandry as well as cottage industries.

(iii) to relieve farmers of the harsh terms imposed on them by private-money-lenders.

(iv) to arrange repayment of farmers' indebtedness to private money-lenders on more reasonable and realistic terms."[21]

In order to carry out these objectives effectively, the ADB was carefully instituted to cater for three types of loans that suit the Ghanaian farmer thus:

"(i) Short-term loan which extends over a period of one year at an interest rate of 8% per annum.

(ii) Medium-term loan which extends over a period of over one year up to 5 years and on which an interest rate of 9% is charged.

(iii) A long-term loan extending over a period of 5 years and above and carrying an interest rate of 10% per annum."[22]

The general impression about ADB's activities shows that the Bank of Ghana has a great influence on the operation of the Agricultural Bank. Critics see the Bank of Ghana's influence as a bad legacy since it functions primarily in money and exchange while the ADB is to extend credit and collect deposits from farmers. On the other hand, the Bank of Ghana needs to keep an eye on the credit-granting activities of ADB in view of the former's new policy to direct sufficient investment funds into agriculture and cottage industries. The funds are placed in the care of ADB for distribution in the

form of loans. "In 1969, the Bank of Ghana, started a credit gurantee scheme for small borrowers. The scheme covered advances by the Banks (including ADB) to:

(i) extractive, processing or manufacturing enterprises, transport repair and servicing with original investment in plant and machinery not exceding ¢ 100,000.

(ii) Agricultural operations not exceeding 100 acres of grain or equivalent;

(iii) Livestock and Poultry farming where the capital cost of the project does not exceed ¢ 50,000;

(iv) Trading activities with an annual sales volume of not more than ¢ 300,000.

The scheme ensures the payment of 1% premium per annum on the above categories of loans to cover 66 2/3% of any sum advanced to a small-scale borrower to be made good in cases of default, and/or total loss. In that way, Banks (both commercial and development) can lend to this category of farmers and businessmen adequate advances knowing that they share their risks with the Bank of Ghana under the guarantee scheme in the ratio of 1:2."[23]

The post-independence period has witnessed rapid changes of Governments in the country but there has been no change on the emphasis on agriculture towards increased production. It is rather the approaches toward the desired agricultural objectives that seem to change. All Governments recognize the financial needs of the Ghanaian farmer and have tried to support him with policies of loanable funds through financial institutions. Table 24 shows the loans granted by the two main development banks in the country.

Table 24

Development Bank Loans (Cumulative as at 31/12/70)

(1)	(2)	(3)	(4)
Financial Institution (Development Bank)	Total Advances to all business	Advances to Agriculture	(3) as % of (2)
Agric. Dev. Bank	¢ 9,435,350	¢ 9,435,350*	100.00
National Inv. Bank	¢ 18,167,012	¢ 3,829,229	21.1
Total	¢ 27,602,362	¢ 13,264,578	48.05

*A small proportion of these loans estimated as about a 1/2 million Cedis has gone into Cold Stores, farm machinery hiring services and cottage industries.

Source: Bank of Ghana, Economic Bulletin Vol. 10, April - 1970.

10.5 Pre-requisites for Agricultural Credit

The provision of credit for agricultural financing does not, (in the present author's own view) require a special theory different from the general principles required for all types of bank credit for any other business enterprise. The basic principes include the credit worthiness of the applicant; determined by the "technical feasibility" and "commercial viability" of the particular project in question. These are proper test for the risks involved in the project and the evaluation of the chances for repayment of the loan.

Agricultural projects in particular, must prove to be technically feasible, economically and commercially viable because unlike trade or insustrial concerns, it is subject to many factors which are beyond human control. For example, adverse weather conditions or incidence of pests and diseases are likely to affect production. In developing countries where transportation, preservation and storage are still a serious problem there is bound to be a great loss of farm produce thereby making agricultural enterprise less profitable. Besides the natural disasters economic and commercial factors are also importantly relevant to any proposed commercial farm project. The interaction of supply of and demand for the particular crop or livestock the farmer wants to grow or raise always plays a role in the evaluation of the farm project. Bankers and officials of other financial institutions are aware of the risks and will consider all aspects of any agricultural project and evaluate the chances of success or failure of a farmer before they decide to grant him a credit.

Since repayment of loans depends on returns from the farm, the financial institutions seek information on how the produce is to be marketed. This is to ensure that the farmer has a good market for his produce to enable him to repay the loan on time. The ADB, for instance lay emphasis on security aspect of borrowing. "A prospective applicant is required to have invested 20% of the costs of the project for which loans are needed to make him eligible for consideration. Mortgages of properties such as farms and buildings are prepared by the Bank. These serve as precautionary messures as well as incentive to the farmers to care for and take a keen interest in their projects. In actual fact, these measures are taken to avoid the repetition of farmers misusing loans granted to them by defunct credit institutions."[24]

After the deposit (20% of the cost of the farm project) the ADB sends a squad of intelligence officers to the field of the proposed project to assess its feasibility and the validity of the declarations made on the application form. After the field studies, the Intelligence Department of the Bank submits a report on the project, recommending or rejecting the application for the loan.

Unfortunately, data is not available for full evaluation of the performances of the Agricultural Credit Institutions. The study would have proceeded further to explore in quantitative terms, the number of farmers who have received credit and the sizes of their farm projects. However, judging from the conditions upon which a farmer may be granted a loan it is not difficult to see that the small peasant farmers have no chance for credit. According to the 1970 Agricultural Census, the average size of holdings is 12 acres. In practice, none of the small-scale farmers will be able to fulfil the conditions laid down in the "credit guarantee scheme for small borrowers". Again, the ADB demands a deposit of 20% of the estimated cost of a farm project as a security before application for a loan is processed. In reality, agricultural credit goes to the "big" landlords and other businessmen who own land but are not engaged in farming. These class of people are actively engaged in other occupations such as building and construction works, trading or running of transport services in the urban centres. Despite all the rigid conditions attached to the granting of agricultural credit, they are able to manoeuvre to be found credit-worthy. After receiving the credit they divert it to non-agricultural activities. There are cases where farm machinery (crawlers, tractor with trailers for carting foodstuffs, etc.)

purchased from loans granted for agricultural purposes have been used for building and construction work in the cities.

The mortgaging of farm properties which may be demanded by the bank tends to slim the chances of small farmers for a loan. A large number of this class of farmers are sharecroppers who do not own the farms themselves. They are therefore, not in a position to enter into any legal agreement of mortgaging the farms for a loan. The small landowners too, cannot fulfil such a condition in view of the existing customary inheritance and tenurial systems.

Proximity of the credit bank and accessibility of their services to the rural farmers are important aspects of Agricultural Credit. The ADB was established in 1965 primarily to aid farmers by granting them loans so as to clear their debts with money-lenders. It is surprising that until 1975, all the bank's offices were located only in the cities and urban towns. A farmer had to travel all the way from his remote village to the Regional Office to collect application forms and later to the Headquarters of the bank in Accra for an interview and so on. Consider how troublesome an active peasant farmer might find the situation. Although complaints compelled the ADB to open several district offices, the problems still exist because the district officers have nothing in their power to grant loans on district level.

The problem with agricultural credit in Ghana is not that there are no provisions for a loan; it is that only the rich who may not be active farmers get agricultural credit.

10.6 Conclusion

As far back as in 1953 Prof. Arthur Lewis[25] suggested in a study which he conducted into the industrialisation of the country that the best way to promote industrialisation in Ghana was to take the necessary steps to raise the food production per person engaged in agriculture. Since that time all succeeding governments attempted, as a matter of policy, to raise agricultural production in three main directions; foodstuffs for local consumption, raw materials for local industries and the surpluses of both for export to earn foreign exchange.

Apart from the success of only one single export crop, cocoa, the attempts in all these three directions were a failure. The failure was largely due to inadequate facilities and abuses of institutional farm credit to the producers. The existing farms could not supply the producers with sufficient capital from internal sources. The tendency was that the land holders were compelled to raise loans from non-institutional sources, particularly the local money-lenders at high interest rates. In that way, the land ownership system was affected because the farmers alienated their farms in order to raise loans from the lenders. Owing to crop failure and other reasons, the farmers were usually unable to pay back the loans and were compelled to surrender farms to the creditors. The impact of this tendency was that a large number of the real landowners and producers became tenants to the local money-lenders or in certain cases, they were evicted from the land completely. Because the local money-lenders had adventitious income, they had the interest to own the land but not to cultivate it.

In short, the lack of a better institutional Agricultural Credit System in the country aggrandized the role played by the local money-lenders whose financial functions with the producers aggravated the problems of the land ownership system.

References

1. La Anyane, S. - op.cit. - p 178.
2. Ibid - p 179.
3. Ekrement, E.A. - "The Development Bank in Agricultural Development" - in "The Ghana Farmer" - Vol. XI - No. 2 - May, 1967 - p 79.
4. See the Statistical Studies carried out in the Faculty of Agriculture at Legon in March, 1963, as quoted by S. La Anyane - "The role of Marketing in Present-Day Ghanaian Agriculture" - in Ibid - p 73.
5. See La Anyane, S. - "Agriculture in General Economy" - in Wills, J.B. (ed.) - op.cit. - p 196.
6. Shephard - op.cit. - p 42.
7. Polly Hill - "The Gold Coast Farmer" - A preliminary Survey - p 63.
8. La Anyane, S. - "Ghana Agriculture" - op.cit. - p 181.
9. Ibid - p 185.
10. Ibid - p 190.
11. Shephard - op.cit. - p 40.
12. La Anyane, S. - "Ghana Agriculture" - op.cit. - p 183.

13. Ibid - p 183.

14. Ibid - p 183.

15. La Anyane mentions; Surridge Report; Department of Co-operation Report; Agricultural Credit Committee; Paton Report; Jibowu Commission; Agricultural indebtedness committee, etc.

16. The increased economic activity came about as a result of the pressure of the population.

17. See La Anyane - op.cit. - p 190 - About 95% of the loaans issued by the company was presumed to be for relieving indebtedness. Only 1% of these loans had been repaid in full by 1957. About 94% of the cocoa farmers who obtained loans had been incapable of repaying within the specified periods.

18. See Beckett, W.H. - "Akokoaso" - A Study of a Gold Coast Village - London School of Economics - 1944.

19. See Ekrement, E.A. - op.cit. - p 79.

20. Ibid - pp 79-80.

21. Ibid - p 80.

22. See Bank of Ghana Economic Bulletin - Vol. 10, April - 1970.

23. Ekrement, E.A. - op.cit. - p 81.

24. Ibid - p 81.

25. Lewis, Arthur Prof. - "Industrialisation and the Gold Coast".

PART V - GENERAL CONCLUSION OF THE RESEARCH

Chapter 11

SUMMARY OF THE FINDINGS

11.1 Introduction

We stated in the introductory chapter that the main thesis of this research is that the system of land ownership which existed during the period under study did not provide adequate security of ownership to match the capital intensity of the development programmes because of the presence of obstacles in the society. Within this framework, we described the economy of the country as dual, that is, it consisted of traditional and modern sectors. The crucial issue was how to transform the traditional system into the modern economy. Accordingly, the thirty-year period was described as transitional. Because of the large involvement of the peasant families in the transformation process, we drew up an hypothesis that the attempts of the changes in the economy were taking place on "the Peasant Cultivator Family Unit" basis. The labour force in the modern sector was not entirely independent of the traditional sector. The income derived from the modern sector could not support the workers to satisfy their economic demands. They usually worked on part-time basis or took off-season jobs on family farm to supplement their income in order to make a living.

The research has revealed that there was no change in the basic land ownership system. The changes that took place were in the utilitarian aspect of land. Even in this dimension there was little impact of the changes on the economy because of the fundamental social elements of communal ownership of land. In a communal ownership system, there is a theory of unsaleable of land which seeks to restore ownership rights of land on every member of the community. In practice, however, land could be sold upon the consent of the community but even so, the property rights of its ownership was at the mercy of the community. Land is a fixed factor and does not increase in size as does population over time. In Ghana's case when the families increased, each member exercised his right of ownership of the communal family land. The result was not only diminshing sizes of holdings but also disputes over land-use which increased to the extent that property rights

of land ownership were impaired. The insecurity of ownership compelled landowners not to take a serious view of investments in land improvements necessary for high production.

This conclusion chapter is to summarise the findings of the research. It reflects on the obstacles in the system of land ownership which contribute to the basic problems of agricultural development of Ghana.

11.2 Summarised Conclusions of the Study

The principal conclusion is that Ghana's poor economic performance during the thirty-year period after the Second World War was due to several obstacles in the system of land ownership. The obstacles were the complex issue of the land problems and the national attitudes of the people themselves. The issues were recognised by several writers who claimed that the biggest obstacle was the land tenure system and described the system as out-moded and even called for its change. The findings of this research confirm the impression but take us a step further. There is a close relationship between the existing native institutions with their customary or legal rights and the land ownership system of the country. Accordingly, we can attempt to explain the land ownership system better by careful examination of the behaviour and actions of the existing native institutions in terms of the restrictions on land-use. The restrictions are expressed in the customary laws which form the basis of the land tenure system. Since the institutions derive their power and authority from the extent of the land in their possession and from their people, it is in practice difficult to attempt to distinguish between the land ownership system and the existing native institutions. The writers focused their attention on the out-moded nature of the land tenure system and demanded that it must be changed. They said nothing about the native institutions. Our findings in this study suggest that it is the native institutions which are the major obstacles in the land ownership system. We cannot change the land ownership system without first, changing the native institutions in the country.

The native institutions emerged as a result of land distribution which was historically the function of military capability. This means that, "before the country was settled in a peaceful way, there were many independent chiefs, each a King in his own province. Inter-tribal strife then began, and gradually, the weaker Kings went to the wall, and the fittest

and strongest became the paramount King of a number of Provinces in a given state".[2] Land was apportioned to the various captains or leaders of the war on behalf of their own people from which the contigents of the armies were drawn. That is why the customary law seeks to it that no member of the community should be deprived of his share of the land. This law has given rise to communal ownership.

Communal ownership of land works well when land is abundant and population is sparse. As soon as the population pressure on the land is felt, as it was in the Southern cocoa areas of Ghana, communal ownership adversely affects investment decisions and innovations on the part of the cultivator. There is bound to be fragementation of holdings and difficulties of acquisitions of new land. Disputes over land boundaries will arise among landowners and no efforts will be made for permanent land improvements. Lands will be owned haphazadly without registration or titles to them.

Under such conditions landowners have no chance for loans for profitable investments. Our findings confirm all such major drawbacks in the communal ownership of land in Ghana during the period. Lewis[3] summarises the whole situation that, "if large numbers of people are free to use the same piece of land, each for his own purposes, each has an incentive to take what he can get out of the land without putting anything back". Hence during the whole historical period the various governments resolved to adopt a policy of agricultural diversification in which farm sizes and modern methods of cultivation featured prominently.

By establishing the large-scale mechanised farms, the Government hoped to "kill two birds with one stone". The farms were to provide sufficient food for local consumption and for export as well as for demonstration purposes for the local peasant farmers. From the experiences gained in the operation of the large-scale farms, the farmers could be trained to gradually change to modern methods of cultivation.

This study suggests that cocoa cultivation was one of the factors responsible for the failure of the attempts at changes from traditional to modern methods of farming. The study does not deny the fact that the cocoa industry reached the commanding heights in the world's production through the strenous efforts of the peasants. It suggests that the industry tended to be an obstacle to changes in the producers' attitudes towards the adoption

of modern methods of cultivation. To the farmers, the advantages of simple, inexpensive readily available tools which fitted the traditional cultivation methods of cocoa were more important than those crops which naturally lend themselves easily to mechanisation, etc. and which demanded heavy capital investment. In this context, the farmers' feverish response to modern methods of farming in other sectors was due to the chance for an alternative for cocoa cultivation. We assume, therefore that, had it not been for cocoa farming, the pressure of the population with its relevant pressure of food needs, etc. of the family would have compelled the producers to adopt the idea of the new methods of cultivation faster and better than they did during the period of study.

Again, the findings of this study reveal that the peasant farmers' reluctance to change from traditional to modern systems of farming was primarily due to the high illiteracy rate which was caused by the late development of education in the country. Scientific farming demands an ability to read and write. A farmer must be able to understand and make simple calculations of certain farm inputs (labour and fertilizer costs, etc.) so that from such record-keeping he will be able to judge for himself whether he is operating the farm at profit or loss. In Ghana's case, it was not only that a high percentage of the farm-owners were illiterates but it was also that nearly all the farm labour they employed could not read and write. Had the farm labourers been literates they could assist the farm-owners by keeping of such records. Literate labourers could have understood better what they were expected to do on farms.

The argument of the importance of education in raising a country's standard of agriculture can be gathered from Schultz's impression that, "rapid sustained growth in agriculture rests heavily on particular investments in farm people related to the new skills and new knowledge that farm people must acquire to succeed at the game of growth from agriculture".[4] The little strides that were made in the field of education during the period were the contribution of land ownership. In the early period the provision for education in the various part of the country was the result of farm income of the landowners. In areas where the system of land ownership granted fair permission for development of farms as a means for higher income, the farm activities increased to attract the attention of educationists who found it profitable to establish schools in the areas. We could not deny that the post-independence policy of fee-free compulsory education

which was introduced was due to land ownership system of the country.

The findings of this research make it clear that the obstacles in the land ownership system in the country were caused by the late development of education. The high illiteracy rate of the large number of the farming population aggravated the problems of land ownership. There was not the slightest indication in any of the several surveys referred to in this study that landowners were aware themselves that non-registration of and non-titles to their lands were hindrances in their farm investments. The co-operative organisations in the country were always a failure partly because the farmers were illiterates. Had the majority of the co-operative members been educated and known their rights, the extent to which the politicians manipulated them would have been limited.

All the abuses and difficulties associated with institutional credit were also basically due to illiteracy and ignorance of the farmers. Even those who managed to get loans did not use them for the main pruposes for which the loans were granted. They bothered more about repayment and not about the best use of the loan for agricultural investment. In effect, agricultural production was seriously affected.

In addition to the several obstacles politics were also a major hindrance to the success of the development programmes. During the post-war period, the nationalism of political agitation for independence was such that it did not give way for effective implementation of the programmes. By 1951, independence had partially been granted and most of the ministeral offices were held by Africans. This was the time that better arrangements could have been made to utilise the available European expertise; but it seemed that the objective for full independence was more important to the African politicians than what they could have done to carry out successful development plans after attainment of independence. The post-independence period was one of political instability in the country. At one time, it was realised that the ideas and plans of the Colonial Government were undesirable and there was a need to change them. At other times, the new changes that the Africans introduced themselves had to be rejected by force of military intervention. The changes of governments and development programmes or the so-called "revolutions" continued dramatically after independence when better development could have taken place.

There is one important fact which our findings reveal contrary to the impression of many observers, It is that the agricultural development programmes failed not because of their emphasis on public or private ownership; for these two systems have somewhat equal achievements in certain developed countries. The failure was due to the fact that all the past leaders resorted to mis-use of political power, disrespect for the peasant producers and the rural community as a whole, and above all, there was a strong wind of corruption which blew throughout the country.

References

1. See Goody, J. - "Technology, Tradition and the State in Africa" - p 42.
2. Hayford, Casely - "Gold Coast Native Institutions" - p 40.
3. See Lewis, W.A. - "Thero of Economic Growth".
4. See Schultz, T.W. - "Transforming Traditional Agriculture".

11.3 Bibliography

A. - BOOKS

Amin, S. (ed.) - "Modern Migrations in West Africa" - Oxford University Press - 1974.

Birmingham, W. (ed.), Neustadt, I. and Omaboe, E.N. - "A Study of Contemporary Ghana" - Vols. I & II - George Allen & Unwin Ltd., - London, 1962 and 1966 respectively.

Boateng, E.A. - "Agricultural Practices and Population Growth" - The Ghana Case [...] - 1968.

- "A Geography of Ghana" - Cambridge University Press - 1959.

Botchway, F.A. - "Political Development and Social Change in Ghana" - Black Academy Press - Inc., - New York - 1972.

Chambers, R. (ed.) - "The Volta Resettlement Experience" - Pall Mall Press - London - 1970.

Caldwell, J.C. - "Population Growth and Family Change in Africa" - C. Hurst & Company - London - Revised edition 1977.

Cheshire - Modern Law of Real Property - 1962.

Commons, J.R. - "Legal Foundations of Capitalism" - 1958.

Dei-Anang, M. - "Ghana Resurgent" - The Camelot Press Ltd., - London - 1964.

Dennis, Austin & Rathbone, Richard - "Ghana" - Penguin Books Ltd. - Middlesex, England - 1961.

Economics of Cocoa Production - Legon - April - 1973.

Foster, Philip - "Education and Social Change in Ghana" - Routledge and Kegan Paul - London.

Gunnarsson, Christer - "The Gold Coast Cocoa Industry - 1900-1939" - Lund University - 1978.

Grove, A.T. - "Population Densities and Agriculture in Northern Nigeria" - Routledge and Kegan Paul - London - 1961.

Green, R.H. & Seidman, A. - "Unity or Poverty?" - Penguin Books Ltd., - Middlesex, England - 1968.

"Ghana Talks, Ghana Past and Present" - The Three Continent Press - Washington, 1976.

Herkovits, M.J - "Economic Anthropology" - Alfred A. Knopg - New York, 1952.

Hayford, Casely - "Gold Coast Native Institutions" - Sweet & Maxwell - London - 1903.

Hill, Polly - "The Migrant Cocoa Farmers of Southern Ghana" - Cambridge University Press - 1970.

- "The Gold Coast Farmer - A Preliminary Survey" - Oxford University Press - 1956.

- "Studies in Rural Capitalism in West Africa" - Cambridge University Press - 1970.

Jack Goody (ed.) - "Changing Social Structure in Ghana" - International African Institute - London - 1975.

Kuper, H. (ed.) - "Urbanisation and Migration in West Africa" - Berkely, California University Press - 1965.

Krassowski, Andrzei - "Development and Debt Trap" - Redwood Burn Ltd., - London - 1974.

Kamarck, A.M. - "The Economics of African Development" - 1967.

La-Anyane, S. - "Ghana Agriculture" - Oxford University Press - London, 1963.

Lewis, W.A. - "Industrialisation and the Gold Coast" - Government Printing Department - Accra - 1953.

- "Theory of Economic Growth" - Allen & Unwin - London, 1963.

North, D.C. and Thomas, R.P. - "The Rise of Western World" - Cambridge University Press - 1973.

Nkrumah, Kwame - "I Speak of Freedom" - Praeger Paperbacks - New York - 1961.

- "Africa Must Unite".

- "Axioms" - London - 1967.

- "Dark Days in Ghana" - Cox and Wyman Ltd., - London - 1968.

- "Ghana" - Nkrumah's Autobiography" - Nelson - 1959.

Ollenu, N.A. - "Principles of Customary Law in Ghana" - London - 1958.

Parsons, K.H. (Prof.) - "Customary Land Tenure and the Development of African Agriculture" - 1971.

Proehl, P.O. - "Foreign Enterprise in Nigeria" - 1965.

Paauw, D.S. and Fei, J.C.H. - "The Transition in Open Dualistic Economics" - Yale University Press - 1973.

Ronald, R. Rene - "Land Economics" - Harper Brothers - New York - 1947.

Seidman, A.W. - "Ghana's Development Experience" - East African Publishing House - Nairobi/Kenya - 1978.

Steel, W.F. - "Small-Scale Employment and Production in Developing Countries" - Praeger Publishing Company - New York - 1977.

Schultz, T.W. - "Transforming Traditional Agriculture" - Yale University Press - 1964.

Valley, W.J. and White, H.P. - "The Geography of Ghana" - Longmans Green - London - 1958.

Wills, J.B. (ed.) - "Agriculture and Land-Use in Ghana" - Oxford University Press - 1962.

B. - ARTICLES AND JOURNALS, ETC.

Bank of Ghana - Economic Bulletin, Vol. 10 - April, 1970.

- Economic Bulletin, Vol. 10 - April-June, 1970. (Abridged)

Beals, R.E. and Menezes, F.F. - "Migrant Labour and Agricultural Output in Ghana" - in Oxford Economic Papers (New Series) - Vol. 22 - No. 1 - March, 1970.

Beckett, W.H. - "Akokoaso: A Survey of Gold Coast Village" - Monographs on Social Anthropology No. 10, London: London School of Economics and Political Science - 1977.

"Koransang Cocoa Farm - 1904-1970" - Technical Publication Series No. 31 - Institute of Statiscal, Social and Economic Research - Legon.

Biebuyck, Daniel - "Land Holding and Social Organisation" - in Economic Transaction in Africa - Herskovitz and Harwitz (eds.).

Daily Graphic - Wednesday - August 17th, 1977.

Cheung, S.N.S. - "Private Property Rights and Sharecropping" - in Journal of Political Economy - Vol. 76, No. 6 - November/December - 1968.

Demsetz, H. - "Toward a Theory of Property Right" - in American Economic Review - May, 1967.

Dorner, Peter - "Land Tenure, Income Distribution and Productivity Interactions" - in Land Economics 40 (1964).

Ekrement, E.A. - "The Development Bank in Agricultural Development" - in The Ghana Farmer - Vol. XI - No. 2, May, 1967.

Ewusi, Kodwo - "The Distribution of Monetary incomes in Ghana" - Technical Publication Series - No. 14 - ISSER - University of Ghana - Legon, 1971.

Furubotn, E.G. and Pejovich, S.- "Property Rights and Economic Theory: A Survey of Recent Literature" - Journal of Economic Literature" - Journal of Economic Literature - Vol. X No. 4 - December - 1972.

Ghana Official Population Censuses - 1948, 1960 and 1970.

"Ghana Timber News" - No. 6 - October, 1974.

Ghana Handbook of Commerce and Industry - Accra.

Ghana Report of the Commission Appointed to Enquire into the Functions, Operations and Administration of the Workers Brigade - Minority Report and White Paper thereon - Accra - Government Printer - 1969.

"Ghana Today" - No. 1 - Self-Reliance - Ghana Publishing Corporation - Accra/Tema, Ghana.

- No. 8 - Education in Ghana 1529-1929 - Ghana Publishing Corporation - Accra/Tema - Ghana.

- No. 9 - Education in Ghana - 1930-1974 - Ghana Publishing Corporation - Accra/Tema - Ghana.

- No. 10 - "Operation Feed Yourself" - The Ghana Publishing Corporation - Accra/Tema - Ghana.

Ghana Social Science Journal - Vol. 3, No. 2 - November, 1976.

Gold Coast Legislative Council Debates - 1948 - No. 3.

Gildes, R.Y. (Jnr.) - "Culture and Land Tenure in Ghana" - in Land Economics 40.

Gulmer, P.H. - "Labour Migration in a Rural Economy" - EAISR - East African Studies - No. 6 - Kampala - 1955.

Inter-American Economic Affairs - Vol. 3, - No. 4 - Spring, 1960.

- Vol. 13 - No. 2 - Autumn, 1959.

Lewis, A.W. - "Diversifying Ghana's Agriculture" - in Bulletin of Ghana Geographical Association, No. 2 - 1958.

- "Economic Development with Unlimited Supplies of Labour" - The Manchester School of Economic and Social Studies - Vol. xxii - No. 2, May, 1954.

Ministry of Agriculture - Ghana - Pilot Census - 1965.

Nigeria Economic Council: Economic Survey of Nigeria - Federal Government Printer - Lagos - 1959.

Nigerian Daily Express - April - 24th, 1965.

"News from Ghana" - Vol. 1/75 - January, 1975 - Information Section - Embassy of Ghana - 13 Egebjerg Alle, Hellerup - Copenhagen/Denmark.

Parsons, K.H. - "Institutional Aspects of Agricultural Development Policy" - in Journal of Farm Economics, December - 1966.

Pauvert, T.C. - "Migration of Workers from Togo to Ghana" - Migration News 4, 1958.

Reid, J.D. - "Sharecropping and Agricultural Uncertainty" - Economic Development and Cultural Change - Vol. 24, No. 3 - april, 1976.

Report of the Bradley Committee on Higher Education - 1946.

Report on Ghana Sample Census of Agriculture" - 1970 - Vol. I - Economics and Marketing Division - Ministry of Agriculture - March, 1971 - Accra.

Report on Current Agricultural Statistics - 1980 - Economics and Marketing Division - Ministry of Agriculture - October, 1968.

Rourke, B.E. and Sakyi-Gyinae, S.K. - "The Agricultural and Urban Wage Rates in Ghana" - The Economic Bulletin of Ghana - Second Series 1972.

Rourke, R.E. - "Wages and incomes of Agricultural Workers in Ghana" - Technical Publication Series - No. 13 - ISSER - University of Ghana - Legon - 1971.

Shephard, C.Y. - Report on the Economics of Peasant Agriculture in the Gold Coast - Government Printing Department - Accra - 1936.

The Pioneer, Wednesday, March 24th - 1971.

The Volta River Project - Vol. I: - Report of the Preparatory Commission (VRP. 1) - HMSO - London - 1956.

The Cocoa Marketing Board Ordinance No. 16 of 1947.

The Central Bureau of Statistics Economic Survey - 1960.

The Ministry of Finance Report - 1959.

The Ghana Seven-Year Development Plan - 1963/64-1969/70 - Accra, Government Printer.

The State Farms Corporation - "First Bi-Annual Report" - Ministry of Agriculture.

The Young Farmers' League Constitution: Aims and Objectives - Accra - Bureau of African Affairs - 1965.

"The Ghana Farmer" - Vol. II - No. 1 - February 1958.

The Progress Report on USAID Activities in Ghana - USAID Agricultural Advisors and Health Education Conferences - December, 10-15th - 1962.

"Timber News" - Vol. 4, No. 2 - April/June, 1976.

Torto, J.O. - "History of Cocoa in Ghana" - The Ghana Farmer - Vol. III - No. 3 - August, 1959.

Uchendu, V.C. - "The impact of Changing Agricultural Technology on African Land Tenure" - Journal of Developing Areas - IV (4) - July, 1970.

Uchendu, V.C. and Anthony, K.R.M. - "Field Study of Agricultural Changes - Bawku District - Ghana" - Economic, Cultural and Technical Determinants of Agricultural Change in Tropical Africa - Preliminary Report, No. 7 - Food Research Institute - Standford University - March, 1969.

United Ghana Farmers Council Co-operatives - The General Secretary's Report 1964-65 - Accra - Jupiter Press.

United Nations Economic Bulletin för Africa - Vol. VI - No. 2 - July, 1966.

United Nations/FAO: - Land Reform, Land Settlement and Co-operatives (1), 1970.

- "Progress in Land Reform" - 4th Report - 1966.

Watson Commission report - 1948.

Woodman, G.R. - "Land Law Reform: Reducing Insecurity of Title 1 and 2 - Legon Observer 11/22 and 23 respectively.

Zelinsky, W. - "The hypothesis of the mobility transaction" - Geographical Review - No. 61 - 1971.

Skrifter utgivna av Ekonomisk-historiska föreningen

I. Oscar Bjurling, Våldgästning och frälse. Lund 1952.

II. Från Fugger till Kreuger. Lund 1957.

III. Lennart Jörberg, Growth and Fluctuations of Swedish Industry 1869-1912. Lund 1961.

IV. Oscar Bjurling, Das Steuerbuch König Eriks XIII. Lund 1962.

V. Gert Tiderius, Lantbruksnämndernas medverkan i jordbrukets strukturrationalisering. Lund 1964.

VI. Jörn Svensson, Jordbruk och depression 1870-1900. Lund 1965.

VII. Björn Lárusson, The Old Icelandic Land Registers. Lund 1967.

VIII. Torun Hedlund-Nyström, Svenska kriser och internationella konjunkturer. Lund 1970.

IX. Sven Nordengren, Economic and Social Targets for Post-war France lund 1971.

X. Martin Järnek, Studier i hushållens inkomstförhållanden 1925-1964. Lund 1971.

XI. Carl-Axel Nilsson, Järn och stål i svensk ekonomi 1885-1912. Lund 1972.

XII. Olle Krantz, Studier i svensk godstransportutveckling efter 1920. Lund 1972.

XIII. Carl-Axel Olsson, Om jordbrukssektorns ekonomi med särskild hänsyn till Sverige under andra världskriget. Lund 1974.

XIV. Göran Ahlström, Studier i svensk ekonomisk politik och prisutveckling 1776-1802. Lund 1974.

XV. Bassey Ndoma-Egba, Foreign Investment and Economic Transformation in West Africa 1870-1930 wigh Emphasis on Nigeria. Lund 1974.

XVI. Rolf Ohlsson, Invandrarna på arbetsmarknaden. Lund 1975.

XVII. Per Gunnar Edebalk, Arbetslöshetsförsäkringsdebatten. En studie i svensk socialpolitik. Lund 1975.

XVIII. Gunnar Ekholm, Det svenska jordbruket och folkförsörjningen under andra världskriget. Lund 1976.

XIX. Neelambar Hatti, American Assistance and the Indian Economy 1951-69/70. Lund 1977.

XX. Oscar Bjurling, Karl VII:s jordebok över Färingö. Lund 1977.

XXI. Rune Bunte, Fiskesamhällen i Sydsverige 1876-1960. Statistisk översikt. Lund 1977.

XXII. Gert Tiderius, Effekten av den statliga rationaliseringspolitiken. Lund 1977.

XXIII. Christer Gunnarsson, The Gold Coast Cocoa Industry, 1900-1939. Lund 1978.

XXIV. Gunnar Persson, Essays on Mobility and Social Reproduction. Lund 1978.

XXV. Rolf Ohlsson, Ekonomisk strukturförändring och invandring. lund 1978.

XXVI. Vidar Svensson, Essays on the EEC-African Association. Lund 1979.

XXVII. Lennart Schön, Från hantverk till fabriksindustri. Svensk textiltillverkning 1820-1870. Kristianstad 1979.

XXVIII: Eric Nicander, Järnvägsinvesteringar i Sverige 1849-1914. Lund 1980.

XXIX. Tommy Bengtsson, Industri under avspärrning. Studier i svensk textilproduktion 1935-1950. Lund 1980.

XXX Charles Edquist. Approaches to thie Study of Social Aspects of Techniques. Lund 1980.

XXXI. Nicholas Wadie Ababio-Appah. Land Ownership in the Economic Development of Ghana 1945-1975. Lund 1981.

ISBN 91-85611-02-6